



July 15, 2022

Los Angeles County Department of Regional Planning  
320 W. Temple Street, 13<sup>th</sup> Floor  
Los Angeles, California 90012

**RE: Los Angeles County Climate Action Plan**

Sent via email: [climate@planning.lacounty.gov](mailto:climate@planning.lacounty.gov)

Dear Ms. Thuy Hua,

[Comments on Draft 2045 Los Angeles County Climate Action Plan](#)

**The League of Women Voters of Los Angeles County welcomes the opportunity to provide feedback on the draft 2045 Los Angeles County Climate Action Plan (CAP).** The [League Climate Change Action Policy](#) supports “energy conservation and efficiency in transportation, buildings, and infrastructure, including energy efficiency standards and land use policies that reduce vehicle miles traveled.” Many of the proposed county actions support League policy positions on [Energy](#), [Transportation](#), [Housing](#), [Water Resources](#), [Solid Waste](#) and [Sustainable Communities](#). Additionally, the League has adopted Ten Actions and Processes that cities can take to reduce their greenhouse gas emissions (attachment) based on review of climate actions taken by local governments across the nation.

**In short, the CAP is a good start, but only a start.** We find that there are many areas that can be improved upon, particularly in the areas of **housing and transportation**. We also find that the plan **depends too much on technology that doesn’t exist yet**, or may not be implementable fast enough to meet our emissions reductions targets. **Avoiding carbon emissions is usually the most cost-effective and there are many proven existing methods that should be implemented more quickly.**

Electrification of buildings and transportation are two of the most effective means of reducing GHG emissions that local governments can take. The CAP proposes to do both of these things. It includes decarbonizing electricity through two means: full subscription in 100 percent carbon-free energy through SCE and CPA and installation of distributed solar panels on new and existing development. Buildings would transition to all electric appliances for space and water heating and cooking. The CAP also provides for electrifying transportation by transitioning vehicles and equipment to zero emission models that are most often electric. Accompanying the transition to electric vehicles is provision for widespread availability of electric vehicle charging stations.

The CAP, however, is missing several evaluations that are important to the CAP road map. It does not examine and identify the appropriate balance between the sources of electric energy. How much energy should be generated by distributed solar within the unincorporated areas and how much energy should be provided through utility-scale generation? What mix of these energy sources will provide the best reliability and cost effectiveness without compromising land use? Are there trade offs? Is there a minimum need for distributed solar and microgrids to ensure reliability? Is there a maximum amount of distributed solar that can be reasonably accommodated? Should the requirements include provisions for storage because there is already excess energy during daylight hours? Identification of a targeted balance is a program-level evaluation that cannot be addressed on a project-by-project basis.

We strongly support the proposed measures for electrifying buildings, but suggest that an incentives program be established to hasten the conversion of existing structures to all electric. We recommend that the CAP require even higher densities of housing near high quality transit areas in order to encourage use of public transit and reduce vehicle miles traveled. The housing plan (T1) permits only 20-50 du/ac, and only in High Quality Transit Areas (HQTA). That kind of density is too low to amortize the cost of elevators or to deliver the minimum Mullin density of 30 du/ac required to make building housing for low-incomes feasible. There are inconsistencies in the allowable du/ac housing section of CAP T1, the [Housing Element Update Zoning Rezoning Program StoryMap](#) and the Transit Oriented Districts in the Housing Element sent to HCD for 6th Cycle RHNA. We wish there was more urgency and reliance on densifying in areas with low [heating and cooling degree days](#) that would reduce or eliminate the need for air conditioning than for whether the buildings had PV solar panels on the roof.

Additionally, we recommend that investments in protected and connected bike lane networks be prioritized earlier than the long term 2030+ proposed in the draft CAP. Improved bike lane

networks are needed to coax people out of cars, and have been proven to work around the world<sup>1</sup> on short timescales<sup>2</sup> of 2-5 years.

We also note that this plan relies on a set of mitigation strategies in the near-term, that would allow Los Angeles County to meet its GHG reduction targets “just-in-time”, if everything falls into place. That isn’t realistic. We need to use a diversified portfolio of approaches with more aggressive implementation schedules in order to offset the likely delays and bottlenecks.

The CAP commits to the development of a large number of strategic analyses. Firm completion dates for these reports need to be included in the CAP so that the information can drive appropriate implementation of GHG reduction measures. These reports include:

- Sunset strategy for oil and gas
- Zero emission vehicle master plan
- Assessment of EV charging locations
- Community energy map
- Feasibility report to identify priority areas for solar, storage and microgrids
- Carbon removal strategy
- Feasibility report for community solar facilities on LA Co properties
- Countywide program to promote energy efficiency and resilience measures
- Transportation technology strategy
- Comprehensive parking reform strategy
- Zero emission delivery zones

We note Los Angeles County has done an exemplary job specifying requirements for utility-scale solar farms that protect biodiversity and environmental justice communities. Having such clear guard-rails informs would-be developers exactly what they need to do and streamlines solar development consideration and permitting. The County can help extend hours of carbon-free electricity supply by permitting utility-scale wind energy development within the county and streamlining transmission development. This diversification would reduce reliance on batteries. Please reconsider the ban on wind energy.

We also find that the plan depends too much on technology that doesn’t exist yet, or may not be implementable fast enough to meet our emissions reductions targets. Avoiding carbon emissions is usually the most cost-effective and there are many proven existing methods that should be implemented more quickly. For instance, direct air capture and sequestration is the

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<sup>1</sup> Bike lanes in New Zealand reduced VMT by 1.6% in cities and total GHG emissions by 1%. If LA County built a connected bicycle lane network and achieved similar savings, GHG emissions would be reduced more than all the DAC plants in advanced development in the US.

<https://phys.org/news/2018-12-lanes-walkways-car-emissions.html>

<sup>2</sup> A bike lane installed in 2015 would reduce GHG by 1.15 Mt of CO<sub>2</sub> by 2020, a savings that would cost up to \$1B if DAC could be scaled up. This is in Thailand, where vehicles displaced by bicycles are much smaller and more fuel efficient. [https://www.gjesm.net/article\\_247328\\_b12cf974dfe8a67a57717a255b325014.pdf](https://www.gjesm.net/article_247328_b12cf974dfe8a67a57717a255b325014.pdf)

most expensive (\$100-\$1,000/ton of CO<sub>2</sub>) way to remove carbon<sup>3</sup>, has never been successfully scaled up, and is marked as a medium-term item. Likewise, on-demand autonomous shuttles (T4.1) don't exist yet and are supposed to be deployed in 2025-2030. Elevators do exist today and we should build taller buildings to exploit the technology, particularly near train stations.

Lastly, we have compiled detailed comments and recommended clarifications for the Implementation Details of Appendix E into an Appendix E' at the end of this letter.

We appreciate the opportunity to comment on this important plan. If you have questions or would like to discuss our comments, we may be reached at the email addresses below. We can also provide the detailed report supporting the two attached graphics and provide information about CAP efforts undertaken by other local governments across the nation that may be helpful to you in your work.

Sincerely,

Margo Reeg,



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Contents:  
Appendix E' comments on CAP Appendix E  
Ten Actions that cities can take to reduce their GHG emissions  
Ten Processes for local GHG reduction planning

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<sup>3</sup> There are only 19 DAC plants in the world, the largest DAC plant only captures 4,000 tons/year. By 2024, DAC may remove 1 Million tons (Mt)/year worldwide. IEA (2021), *Direct Air Capture*, IEA, Paris  
<https://www.iea.org/reports/direct-air-capture>

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**Appendix E': comments on entries in  
Table E-1: GHG Strategy, Measure and Action Implementation Details**

ES1: Develop a sunset strategy for all oil and gas operations. The tracking metrics need to address the percentage reduction of the performance objectives and not simply identify the number of wells addressed. They should also track the difficulty of projects to ensure that low-hanging fruit is not dealt with first instead of the worst leaks (GHG emissions & groundwater contamination).

ES2: Procure Zero Carbon Electricity. The performance objectives and tracking metrics need to confirm that the CPA and SCE green options are actually 100 percent zero carbon sources of electricity instead of paper RE credits.

ES3: Increase Renewable Energy Production.

The focus on roof-top solar to the exclusion of all else is risky and non-resilient. Heavy reliance on solar must be paired with storage for post-sunset, peak energy needs. Relaxing the ban on utility-scale wind projects would also help broaden the hours when local Renewable Energy is available.

LA County already developed clear rules for the development of utility-scale solar (the most cost-efficient type of solar power). This has streamlined solar permitting while protecting vulnerable populations and biodiversity. LA County needs to do the same for wind turbines, transmission and storage (battery) permitting.

The performance objectives listed for ES3, ES3.1 and ES3.2 are inconsistent and need to be clarified. ES3 objectives address existing residential multifamily and commercial buildings while ES3.2 includes multi-family and single-family residential buildings. ES3.2 also uses two different objectives for single family residential buildings. Tracking metrics for ES3.2 don't mention single-family structures, and use actual numbers of installations without referencing the percentages used in the performance objective.

ES3.1 requires rooftop solar for all new development. Given the urgency to develop housing, the difficulty procuring rooftop solar systems, and soaring costs, the CAP needs to address allowing housing occupancy before rooftop solar systems are complete.

ES3.2 includes a performance objective for new buildings with a phase in percentage that is lower for commercial development than for residential development. In the supply chain crisis for rooftop solar components, installers are favoring larger, commercial customers over residential ones. DOE reports on the cost of solar projects also show that residential solar costs

1.5 times as much as commercial solar and 2-3 times as much as utility-scale solar. Local solar generation provides resiliency benefits that distant solar farms cannot. But the implementation timelines should be reversed to prioritize larger commercial, community-scale and multi-family rooftop solar systems over smaller ones on single-family homes.

Further, the performance objectives and tracking metrics need to define what qualifies as a rooftop solar installation or it can be gamed and allow development to skirt the requirement. It should also spell out how to handle supply chain shortages and deadlines to install them when materials become available. Should it meet a certain minimum amount of electricity demand? Or cover a minimum amount of rooftop?

ES3.3 and Es3.4 would install solar PV systems and community-shared solar facilities on “LA Co properties where opportunities exist.” We recommend that the first performance objectives and metrics include development of a report that lists the properties, the potential for PV systems at each property, the LA Co facility and/or the community to benefit from the PV system and includes a date for the report to be submitted to the Board of Supervisors with specific recommendations for implementation.

The county should also work with communities and energy experts to define how community-shared solar facilities would work. Who pays? How is it financed? Who has energy priority? (E.g. who is first in line for the energy produced vs who has to buy energy from the grid at a higher cost?) Stakeholder engagement needs to happen soon as it may take longer than physical implementation.

ES3.5 aims to install rooftop solar at all affordable housing developments. However, the proposed metric of success/progress is the number of systems installed. Priority should be placed on helping the most people soonest, and then moving on to the smaller systems. Better metrics would use the total size/capacity of systems, the energy they produce (for reducing GHG emissions) or number of people helped both in the affordable housing development and in the surrounding area. (The medically fragile, suffer disproportionately in power shutoffs and brownouts.)

We suggest that the county create a prioritized list of affordable housing developments, their vulnerability index (resident fragility, number of residents affected, vulnerability to extreme heat and power shutoffs), and then work off that prioritized list. The timeline should be constant in people helped instead of individual systems installed.

ES4.1 One resilience hub in each LA County district is not enough, especially in the hotter, inland areas. We would like to see a timeline for when the minimum five hubs will be completed, and a schedule for how many will be completed each year and which communities will be targeted first. We suggest you also partner with schools, which often already have solar systems without

storage. Leverage new multi-family and mixed-use developments with solar PV and storage for cost-effective resilience centers.

ES4.4 The first performance objective needs to be a report by a specified date.

#### T1. Increase Density Near High-Quality Transit Areas.

Promises of parking reform need to be clarified with deadlines and details. Explicitly define which areas will be zoned for which densities, under which circumstances, and lift the density cap near train stations.

Mixed-use developments near train stations provide mobility and enhance quality of life for wheelchair users. Higher densities allow them to ride an elevator to places they need to go. Consider 2-3 wheelchair users traveling together; buses can't provide the full mobility and social integration that trains can. Every unit not built is another person stuck at home or waiting for a bus that may never come, or may not have capacity for their wheelchair.

20 du/ac in HQTAs is too low; it doesn't even meet the minimum Mullin density of 30 du/ac required to plausibly provide affordable housing. Denser, taller buildings with more homes allow the cost of elevators and backup batteries to be amortized over more households, increasing affordability. Larger apartment buildings can organically become resilience centers.

The CAP appears to be inconsistent. Some places say that 20 du/ac will be allowed, others say 50 du/ac. Is that H50 (20-50 du/ac) or H100 (50-100 du/ac)? The zoning map shows that current zoning and densities inside HQTAs in Del Aire and Alondra Park are R-1 and 7-8 du/ac<sup>4</sup>. The proposed rezoning program<sup>5</sup> does not show rezoning of these R-1/H18 areas to H50 (20-50 du/ac). On some commercial corridors, rezoning to up to 150 du/ac is proposed. Please be consistent and clear.

Proposed rezonings rely on adding homes along commercial corridors with heavy traffic, noise and pollution. People can benefit from access to transit while living on quieter and safer streets a few blocks away from arterial corridors. The only places where the rezoning plan will upzone on quiet residential streets are in Florence. Upzone higher opportunity residential areas in Del Aire, Alondra Park, West Fox Hills and incentivize lot combinations suitable for multi-family homes at Mullin densities. These areas are close to jobs, good schools, transit, parks, have lower pollution burdens and are low risk for heat stress should the power go out.

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<sup>4</sup> LA Co Zoning Map

<https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=7700eea9d54d46b18efb615f86cba25c>

<sup>5</sup> Housing Element Update Rezoning Program

<https://storymaps.arcgis.com/stories/c1ade07ca342481a88bfd877252e4713>

In HQTAs, house more people, fewer cars. Lift parking minimums immediately and incentivize active transportation, micro-mobility, transit and car sharing.

T2. Land Use Addressing Jobs-Housing Balance. Allowing up to 300 jobs/ac in new projects while only allowing 20 du/ac will exacerbate the jobs-housing imbalance.

T2.1 Define jobs-housing imbalance. What ratio is acceptable? Also consider jobs-housing fit. What incomes are required to afford the housing and how much will the jobs pay? If the housing is not affordable to the people working in the area, then VMT will climb.

S3 Reducing Single-Occupancy Trips is key to our CAP because transportation is the County's greatest GHG emissions sector. If we continue Business As Usual (BAU) in the personal transportation sector, and delay action until 2030+, we will have missed the opportunity to keep the warming to 2°C, much less 1.5°C. Moving as many trips outside of cars/light trucks as possible and then electrifying the rest is a reasonable strategy<sup>6</sup>. But, given the supply-chain difficulties plaguing battery and car production, we should prioritize moving people out of cars. That's the only part that LA County can control. That requires building out connected and safe local travel networks suitable for e-assist bicycles, scooters and wheelchairs now.

T3. Expand Bicycle and Pedestrian Network. Bikeway miles included in the performance objectives should be broken out by Class of bikeway (1-4). Class III bikeways (aka sharrows) where bicycles and vehicles are expected to share travel lanes should not count towards the total as they have been proven to be more dangerous than no designation at all.

The amount of protected bikeways resilient to human error or malice is the most important metric. Service workers commuting home after dark should not be fodder for drunk or malicious drivers. A bicycle commuter should be as certain to get home unscathed as a motorist. Place priority of building out protected bike lanes in high-injury networks and along east-west corridors where the rising or setting sun can blind motorists.

T3.1 Building out a connected and safe bikeway network should be an immediate priority. We cannot wait until 2030+.

T4. Broaden Options for Transit, Active Transportation and Alternative Modes of Transportation. Tracking metrics need to address all the listed performance measures and include percentages that can be compared to the objectives.

T4.1 On-demand autonomous vehicles are not likely to operate 2025-2030. The only on-demand autonomous electric vehicles that exist today are electric elevators. Allow taller

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<sup>6</sup> Decarbonizing US passenger vehicle transport under electrification and automation uncertainty has a travel budget, <https://iopscience.iop.org/article/10.1088/1748-9326/ab7c89>



buildings to spread out the cost of the elevators. This advances resiliency because elevators use back-up batteries in case of power outages. Enlarge the battery storage and the buildings become community resiliency centers, which also allow the medically fragile to shelter at home.

We need clear operating rules for delivery drones and autonomous vehicles (AV). Where will delivery drones operate? Will they use scarce sidewalk space? Who gets priority on a narrow sidewalk when they encounter pedestrians and wheelchair or walker users? For autonomous vehicles, do we minimize motion sickness of AV passengers by reducing automatic braking, or do we allow more pedestrians and cyclists to be killed or maimed? We need public engagement, consensus and clear rules.

T4.2 Increasing bus headways means reducing bus frequency. Is that a typo? Again, we cannot wait until 2030+ to speed up buses. The technology is available today. In a climate emergency, we need to give transit and active transportation signal priority and dedicated road space today.

T5. Eliminating parking minimums and unbundling parking from housing will help reduce housing costs and help us develop more housing where people want/need to live. Parking maximums near transit would also be instituted. This should be immediate. There is already plenty of research that shows removing parking reduces VMT and the number of vehicles each household owns.

Also, put in electric vehicle shares in new construction to reduce the need for personally-owned cars. Add cargo e-trikes and electric mopeds in appropriate locations.

S4 Low Carbon Transportation must consider supply chain and reliability issues and include smaller, lighter and less material-intensive e-assist vehicles such as scooters, bicycles, tricycles, mopeds and golf carts.

T6.1. Develop a zero emission vehicle master plan. This master plan is fundamental. The performance objective needs to include a date by which the plan will be submitted to the BOS for approval. Again, lead with smaller, lighter, less expensive e-assist mobility such as scooters, bicycles, tricycles, wheelchairs, mopeds and golf carts.

T7. Electrify LA county fleet vehicles. Tracking metric needs to include percentages to allow comparison to performance objectives. Sheriff and fire vehicles need to be included in the electrified fleets. E-bikes should be used by deputies and EMTs in urban areas. Britain has found that EMTs on E-bikes reach patients faster in urban environments because they can filter through traffic and can park closer to people needing aide.

T8.1 Include performance objectives and tracking metrics for adoption of ordinances establishing zero emission delivery zones.

T9. Expand use of Zero Emission Technologies for Off-Road Vehicles and Equipment. Please specify the inclusion of blowers and mowers in this requirement.

S5: Decarbonize Buildings does not mention active or passive shading on new buildings or retrofits. They can save 10-50% of cooling costs and should be required in all new development.

E6. Reduce Indoor and Outdoor Water Consumption. This measure includes performance objectives for reduction of total water use, but does not indicate the source for the objectives or how they would be measured. Please clarify.

E6.3 This measure proposes an ordinance for water-conserving landscaping, but provides no detail or date by when an ordinance would be adopted. Please clarify the intent and timing of this measure.

S8: Minimize Waste and Recover Energy and Materials from the Waste Stream

Continue to reduce both the total volume of solid waste and diversion of recyclables and organic waste. “The League supports the concept of environmentally sound waste-to-energy plants, both as an alternative to land disposal and as a form of resource recovery”<sup>7</sup> with advanced pollution controls. The CAP does not mention waste incineration even though SERRF is closer than landfills for many unincorporated parts of the county. County should also partner with the oil and gas industry to convert their assets to compost and biofuel production from diverted waste. Utilizing SERRF and moving green waste recycling closer to generation will reduce VMT, GHG emissions and air pollution from trucks.

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<sup>7</sup> p 51, LWVC Sustainable Communities

[https://my.lwv.org/sites/default/files/leagues/wysiwyg/%5Bcurrent-user%3Aog-user-node%3A1%3Atitle%5D/lwvc\\_action\\_policies\\_and\\_positions\\_2020\\_1.pdf#page=48](https://my.lwv.org/sites/default/files/leagues/wysiwyg/%5Bcurrent-user%3Aog-user-node%3A1%3Atitle%5D/lwvc_action_policies_and_positions_2020_1.pdf#page=48)



## TEN ACTIONS that cities can take to reduce their GHGs

### Move away from fossil fuels

1. Terminate fossil fuel *purchase contracts*/enter only into renewable energy contracts.
2. Permit *new construction* only without fossil fuel energy.

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### Electrify buildings

3. Retrofit or build *municipal structures* for renewable energy supply and energy efficiency. Install solar PV systems.
4. Require, or create incentives for, retrofit of *private buildings* for renewable energy supply and energy efficiency.
5. Offer incentives for and facilitate residential, neighborhood and commercial *rooftop solar*.
6. Offer *community solar* programs to enable renters/low-income persons to enjoy benefits of low cost renewable energy.

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### Electrify vehicles

7. Replace fossil fuel *municipal vehicles* with renewable energy powered vehicles.
8. Install, or incentivize the installation of, *EV charging* stations in public and private parking lots and convenient locations.
9. Offer incentives and rebates for *EV and electric appliance* purchases.

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### Reduce vehicle use

10. Reduce vehicle miles travelled (*VMT*) by planning measures and incentives to use public transportation.



## TEN PROCESSES for local GHG reduction planning

### Set goals, measure, hold accountable

1. Set annual GHG reduction *goals*.
  2. Take *inventory* and use SMART metrics.
  3. Establish *consequences* for failure to meet goals.
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### Actions and budget

4. Clarify *specific actions* to be taken.
  5. Assign *authority and budget*.
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### Integrate actions with public priorities

6. Link GHG reduction plans to *workforce development*.
  7. Link GHG reduction plans to affordable *housing and utility* bills.
  8. Integrate climate action with *building codes*.
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### Transparency

9. Embrace public *transparency* at all stage of planning
10. Use Climate Action Plans (CAPs) for their intended *purpose of GHG emissions reduction*.