

HUMBLE

Health Impacting Emissions in Culver City

Sustainability Sub-committee Meeting

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Health Impacting Emissions (HEI) are those that significantly worsen community health

Particulate Matter (PM)

Known health issues heart attacks, aggravated asthma, decreased lung function, and premature death.

Nitrogen Oxides (NOx)

Exacerbates respiratory diseases like asthma and leads to reduced lung function.

Sulfur Dioxide (SO₂)

Can cause acid rain and is associated with respiratory issues, particularly in asthmatics.

Volatile Organic Compounds

Causes respiratory irritation and long-term health issues, including liver, kidney, and central nervous system damage.

Carbon Monoxide (CO)

Deadly at high levels, it reduces the blood's ability to carry oxygen, leading to severe tissue damage and death.

Ozone (O₃)

At ground level, it causes respiratory problems and other serious health issues.

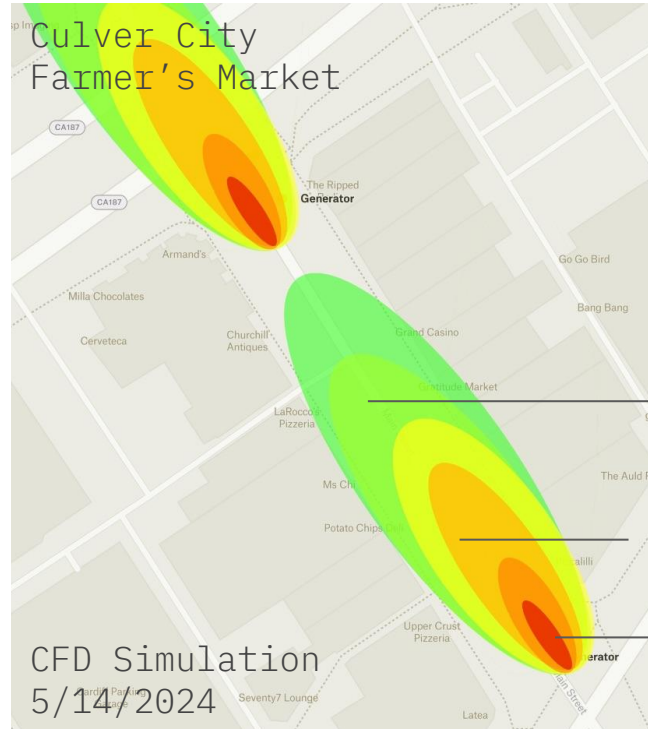
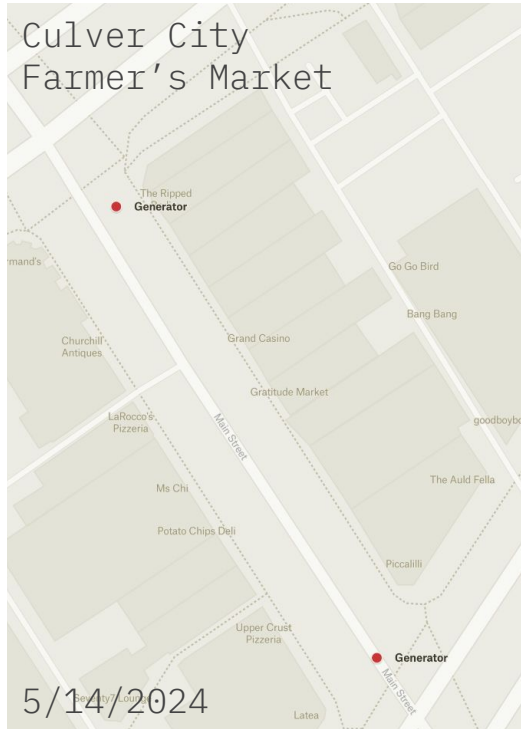
Small gas generators are a large contributor to Health Impacting Emissions

Small gas generators create environmental pollution that can be worse than exposure from coal mining.

According to the California Air Resources Board, one small generator over one hour emits more pollutants than a 1970s car driving 150 miles.

The broader category for gas generators create Health Impacting Emissions comparable to 25% of all vehicles on California roads.

This is an existing issue in Culver City at weekly Farmer's Market and other events.



Clean energy solutions exist – but vendors are “not interested” – with good reason.

Weight

Batteries that are powerful and long-lasting enough to replace small gas generators can weigh hundreds of pounds.

Just one bounce house can require over 500 pounds of batteries.

Charge Time

Vendors can work 12+ hour shifts.

Charging batteries can take two to six hours – IF the vendor has easy access to power in their apartment buildings.

Cost

Workers would need to spend over \$5,000 to replace gas generators, and don't want to adopt them because the technology is changing and batteries depreciate very fast.

Potential public-private micro-partnerships ideas, inspired by the EV market.

Low-Cost Battery Rentals

Offer subsidies to lower cost of batteries to make it comparable to gas costs for a generator, like Market Match does for farmers.

Change Permitting Process

Require events using public spaces to actively consider clean energy alternatives.

Reduce Permit Costs

Reduce permit costs for vendors that deploy clean-energy solutions.

Grants

State and government funding, CARB, and other institutions.

Private Sponsorships

Reach out to local businesses and sustainability-focused brands.

New Eco-Events

Create sustainability events, fairs, or festivals highlighting sustainability focused community vendors.

Reducing HEI improves communities and boosts the bottom line for small businesses

Community Health

Even if all cars switch to EV, small generators will still contribute significantly to HEI.

Improve Safety

Gas generators legally require permitting and approval from fire departments in many areas, highlighting their risk.

Increase Energy Equity

City-sponsored (clean) energy would be available to all vendors, not just those that can afford generators or 4 digit batteries.

Support New businesses

Freely available energy allows for new vendor types, micro-businesses, artists, etc, to participate in city events.

Directly Increase P&L

Free energy would increase P&L of generator vendors by up to \$150 in labor and materials.

Quality of Life Improvements

Reducing noise is the biggest way to increase happiness in living, working, and dining situations.

Our experience shows that this can work with community support.

We are a public-benefit pending corporation dedicated to reducing HEI through clean energy initiatives.

Deployed the largest amount of batteries for a Los Angeles event at Bridgefest at cost in partnership with CD 14 and business improvement organizations.

Grant-sponsored partnership with CicLAvia for clean energy at their events, which has increased the vendors they've been able to support.

Humble is based in Los Angeles, CA.

SUPPORT & FUNDING

LADWP

CITY OF LA

DEPARTMENT OF ENERGY

SELECTED CLIENTS

CICLAVIA

LA CITY COUNCIL DISTRICT 14

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