

## Renewable Energy Generation in LA County

#### **Renewable Energy Ordinance Update**

May 13, 2025

## **Welcome / Introductions**

**County Project Team** 

- Mark Herwick, Supervising Regional Planner
- Katie Lample, Regional Planner
- Lorraine Acuña, Regional Planner



## Agenda

- Project Overview
- Existing Renewable Energy Generation in LA County and changes to consider

SHAP

Discussion



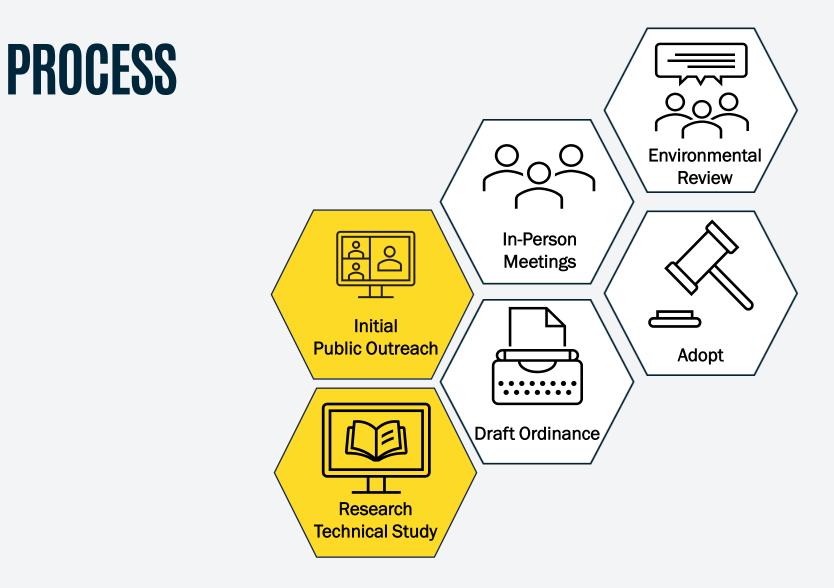
## PROJECT OVERVIEW

- Update the Renewable Energy Ordinance, with a focus on accelerating development of utility-scale renewable energy
  - Renewable energy development 'areas'
  - Size threshold for ministerial/discretionary project approvals
  - Community benefits

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- Evaluate ban on utility-scale wind
- Reassess transmission line undergrounding requirement



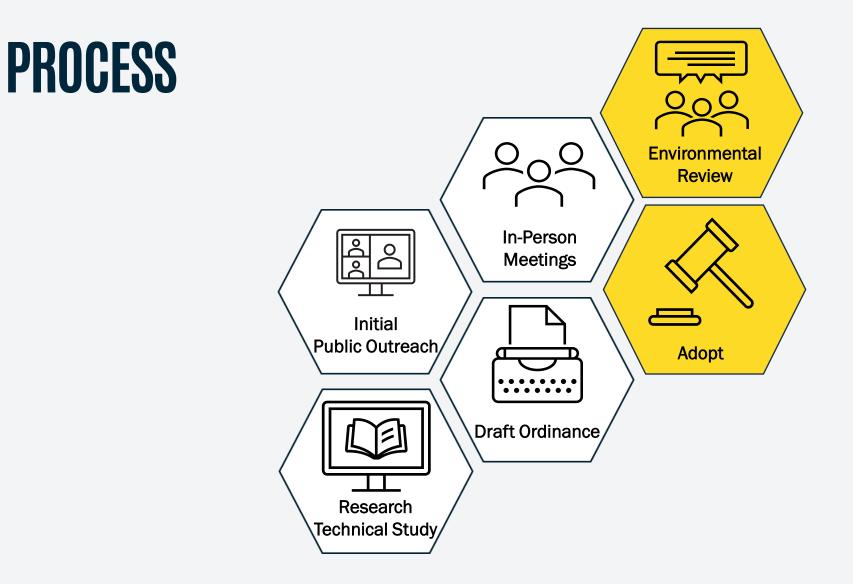




## PROCESS





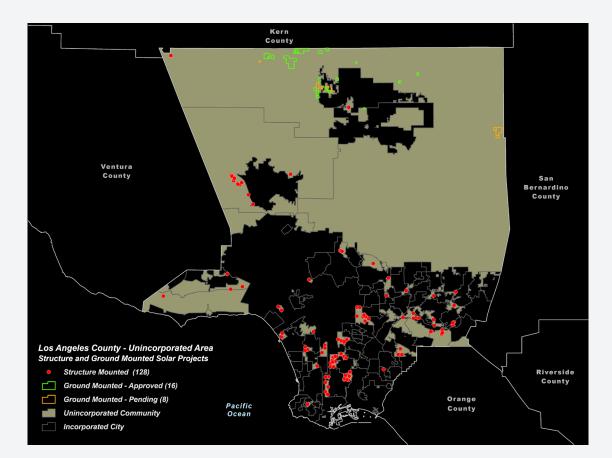


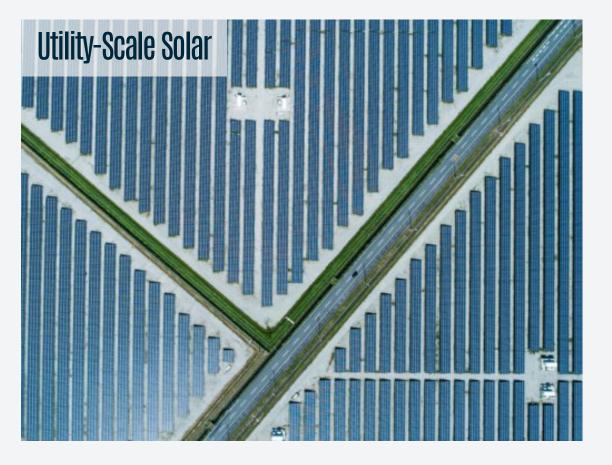


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# RENEWABLE TECHNOLOGIES

## **Utility and Commercial-Scale Solar**

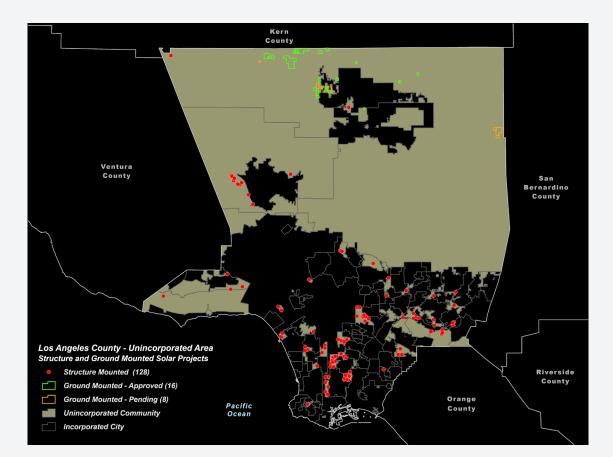




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## **Utility and Commercial Scale Solar**



# Structure-Mounted aka 'Commercial Scale' Solar

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## **Utility and Commercial-Scale Solar**

#### **Current Ordinance**

- Structure-mounted commercial-scale solar allowed in all zones except for open space and water.
- Ground-mounted **utility-scale** solar facilities are allowed with a CUP in Zones:
  - Agricultural (A-2)

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- Commercial (C-H, C-1, C-2, C-3, C-M, C-R, C-MJ, C-RU,
- Industrial (M-1, M-1.5, M-2, R-R, MXD-RU, MXD, and IT)

#### **Utility-Scale Siting Considerations**

- Resource potential.
- Projects require flat terrain.
- Parcel size.
- May require grading or other interventions to prevent stormwater runoff.
- Interconnection.

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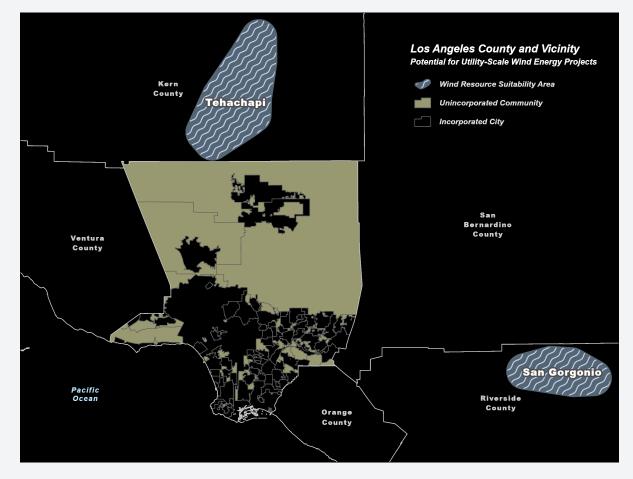
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## **Comments?**

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## **Utility-Scale Wind**





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## **Utility-Scale Wind**

#### **Current Ordinance**

• Prohibited in all zones

#### **Siting Considerations**

- Size: Large turbines (greater than ~1MW)
- Resource potential: large wind turbines require an average annual wind speed of 15 mph at 240 feet in height.
- Interconnection.



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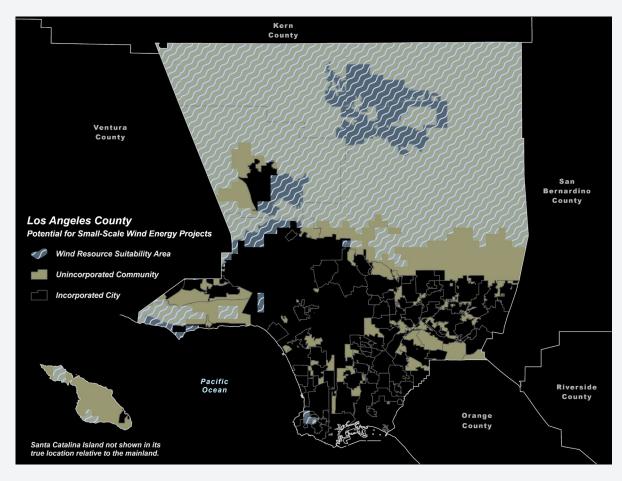
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Photo from Southwest Windpower, NREL 14936

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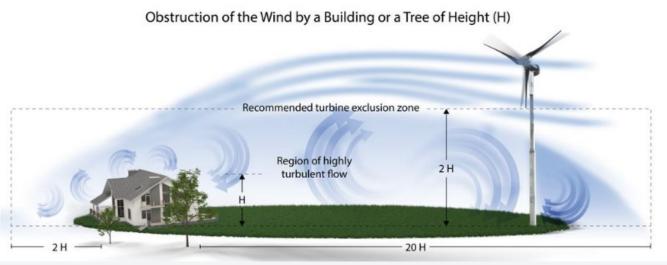
#### **Current Ordinance**

- Small-scale wind facilities are allowed with a minor CUP in Zones:
  - Residential (R-1, R-2, R-3, R-4, R-5, R-A)
  - Agricultural (A-1, A-2) and
  - Open Space (O-S)
- Max. tower height:

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- 35' (lots less than 1 acre)
- 65' (1-2 acres)
- 85' (2+ acres)
- Min. Distance from property line/road:
  - Equal to height of the wind system



Source: WindExchange Small Wind Guidebook



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#### **Siting Considerations**

- Size:
  - Small turbines (less than 100 kW) Average height is 160 feet.
  - Midsize turbines (101 kW to 1 MW) Average height is 250 feet.
- Resource Potential: small wind turbines require an average annual wind speed of 9 mph around 130 feet in height.
- Interconnection.

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## Green Hydrogen

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Source: https://www.sbec.com/About/Company-News/--SB-Completes-Green-Hydrogen-Plant-/



Photo of a green hydrogen production facility in Woodbine, Georgia (15,000 kg/day of liquid hydrogen)

- Electrolysis: the splitting of hydrogen and oxygen from water molecules
- When the electricity to operate electrolysis is renewable, the hydrogen is considered 'green'

## Green Hydrogen

#### **Current Ordinance**

• Not included.

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#### **Siting Considerations**

- Project needs 100 + acres.
- Likely involves hydrogen storage in tanks ranging from 1,500 to 25,000 gallons.
- Electrolysis is water intensive .
- Requires transportation and storage of hazardous materials.

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## **Comments**?



# COMMUNITY BENEFITS

Develop an approach to ensuring community benefits for renewable energy projects that promotes community resiliency in impacted areas.



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Develop an approach to ensuring community benefits for renewable energy projects that promotes community resiliency in impacted areas.

#### Examples from other jurisdictions:

- Infrastructure improvements
- Job creation
- Community services
- Economic development
- Enhancement to quality of life in neighboring communities

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What are some community benefits/investments that you would like to see in your community?



# Final Questions?

# Next Steps

## Workshop Meetings

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• Battery Energy Storage Systems (June 17th)

## **Stay Involved**

- Survey
- Listening Sessions
- Mailing List



## **CONTACT US**

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https://arcg.is/0TCbjT0