THE ATLAS OF DIGITALIZATION

Los Angeles A US trailblazer

City data report 2021







OVERVIEW

The Californian city of 15.5 million people is transforming its reputation by setting ambitious sustainability targets, powering the bright lights of Hollywood with a growing renewable energy sector.

DIGITALIZATION READINESS

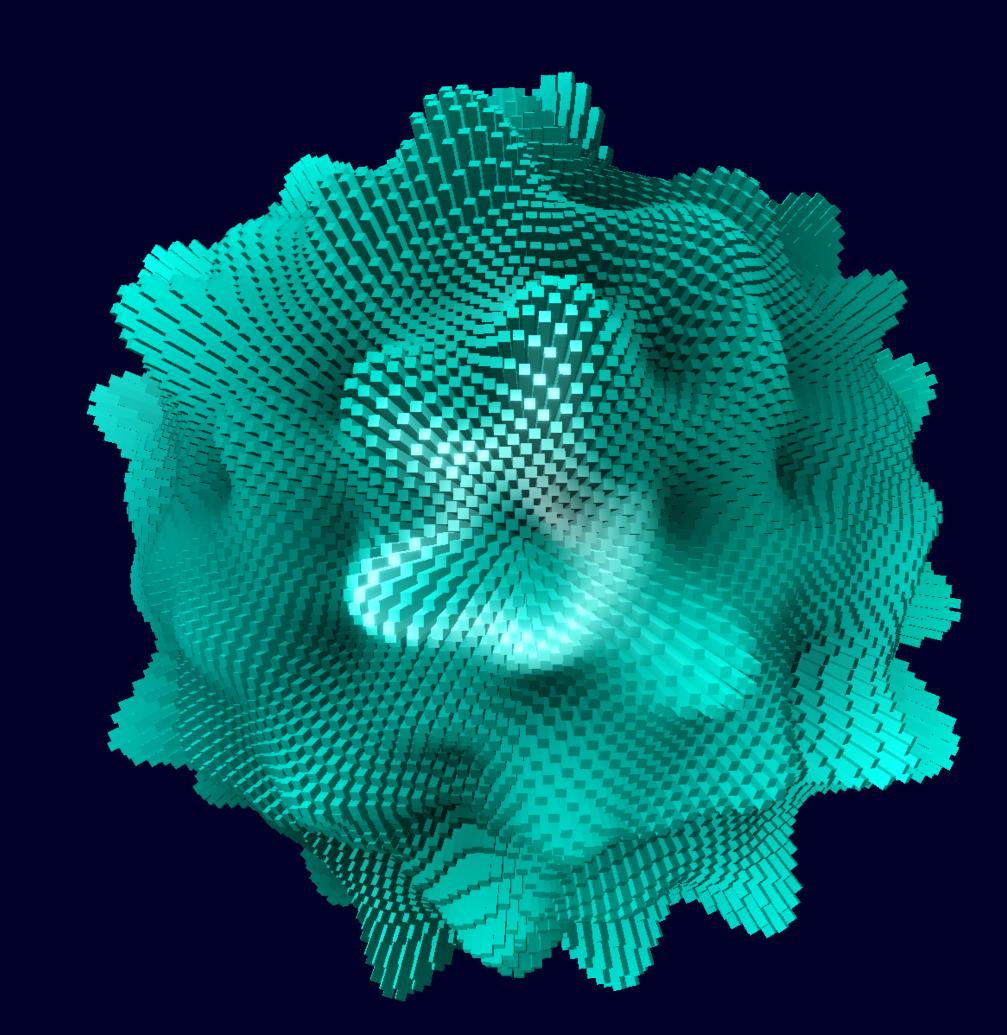
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Los Angeles achieves a high Digital Readiness score for its widespread internet infrastructure and smart meter use.

DIGITALIZATION POTENTIAL

Los Angeles must integrate attempts to relieve congestion and reduce carbon emissions with new product ecosystems such as electric car sharing, recharged by energy from virtual power plants.







SUSTAINABILITY

Solar panels could reduce reliance on carbon energy sources

Greenhouse gas emissions have already fallen more than 20% since 1990, but Los Angeles will need to accelerate efforts to realize its ambitious goals. An analysis by the **Siemens City Performance Tool** predicts that the ongoing rollout of rooftop PV panels could reduce LA's reliance on carbonproducing energy sources and create around 70,000 full time jobs between now and 2050.

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LA's GHG emissions, annual metric tons of CO₂eq, (from energy use in buildings and transportation)



*from energy use in buildings and transportation

Source: Siemens City Performance Tool

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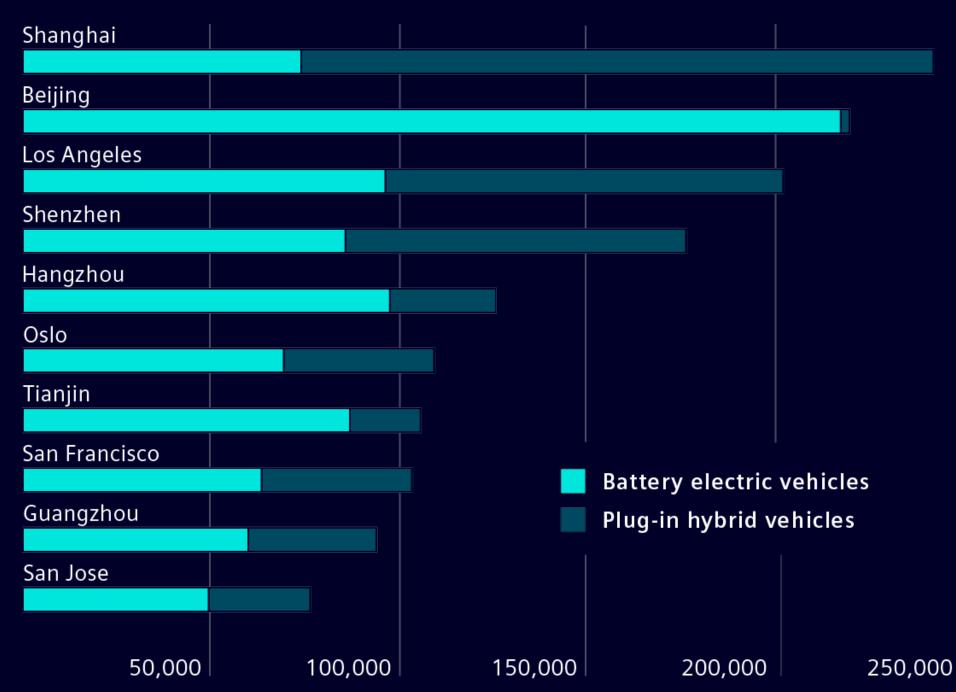
MOBILITY

More electric vehicles have been sold in Los Angeles than any other city outside China

If Los Angeles is to meet its 2050 goal, traffic has to get cleaner. The Los Angeles **Department of Transportation** plans to convert its entire bus fleet to electric buses by 2030. Siemens has also installed its **eHighway** technology along a 1.8 km test track near Long Beach, and demonstrated how hybrid electric or fully electric trucks could charge while they drive. There is also potential for the 2028 Summer Olympics to be an agent for this lasting transformation.



Cumulative electric vehicle sales, through 2018



Source: International Council on Clean Transportation





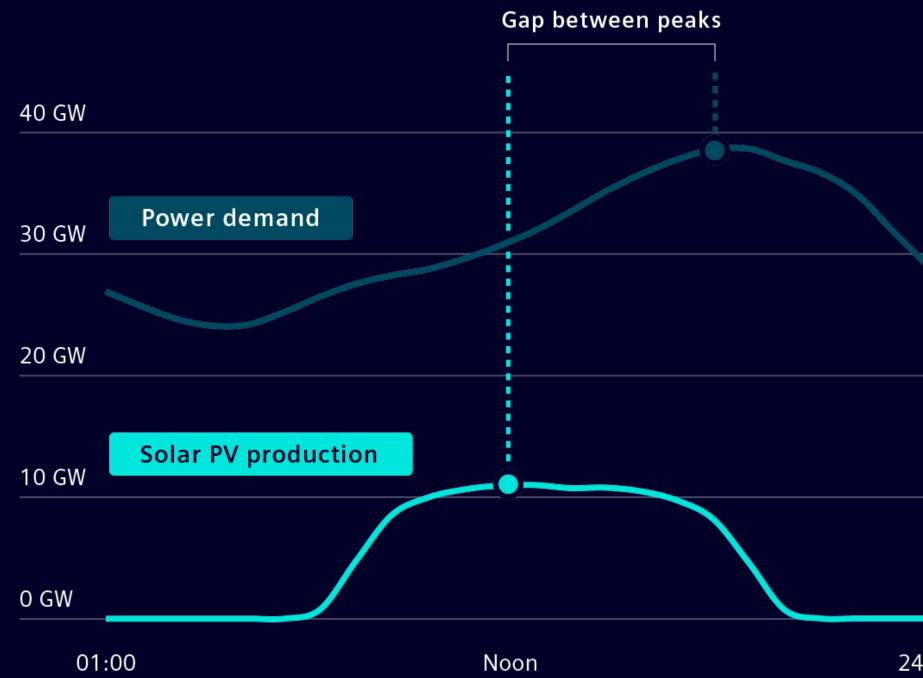
OPPORTUNITY

Distributed Energy Resources are used to generate energy locally

Even on well-performing grids, the long-distance transfer of electricity can result in around 9% of energy being lost. **Distributed Energy Resources (DERs)**, such as rooftop solar panels, allow electricity to be generated locally. This helps to reduce transmission and distribution losses and provides a backup in case one system fails.

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California peak solar production versus power demand, August 1, 2019

Source: California Independent System Operator

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