

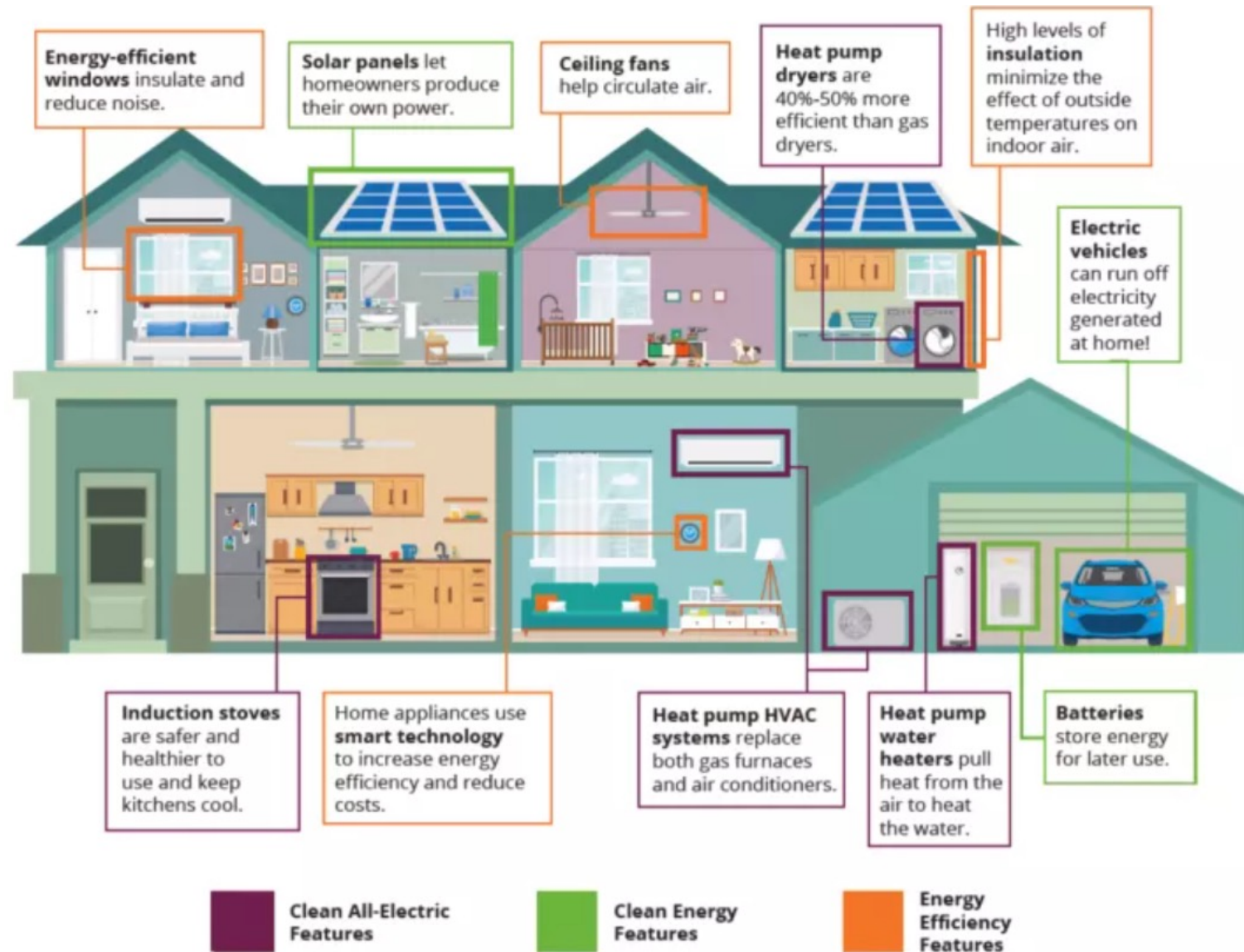
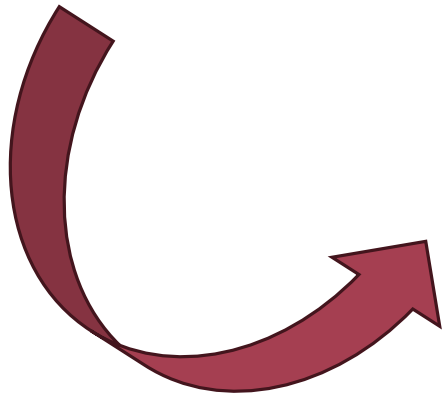
Better Grid Planning Through BUGMAP



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HOW DO THESE CHOICES AFFECT THE GRID?





Zooming in on electricity use at the customer level...

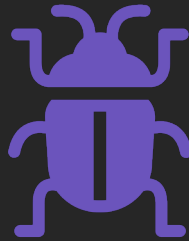
...allows us to zoom out to better grid planning.

A stag beetle is positioned on an old, yellowed map that lies on a wooden desk. The map shows various geographical features and text. In the background, there are several books, some with leather covers, and a small lamp with a warm glow. The overall atmosphere is that of a quiet, old library or study.

BUGMAP

Bottoms-up Grid Model Adaptive Profiles

WHY BUGMAP?

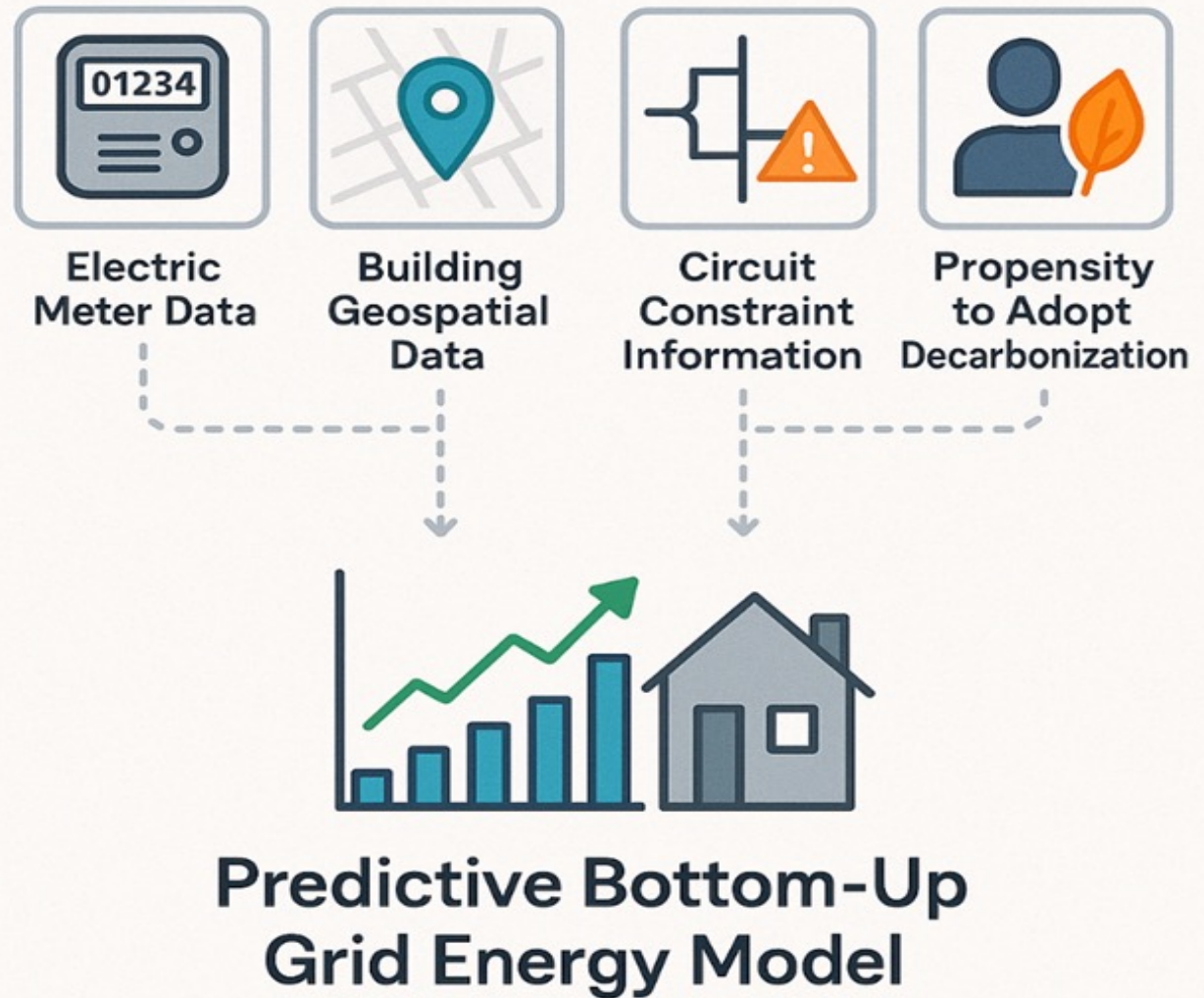


Q: *How will peak load change on the Cucamonga Circuit with 95% adoption of heat pump water heaters by residential customers?*

Questions like this can be difficult to answer with traditional top-down load forecasting methods (projecting total load and distribute it amongst the grid's circuits).

In contrast, BUGMAP forecasts individual customer loads with building energy models and aggregates them to form circuit estimates.

HOW TO BUGMAP



HOW BUGMAP BUILDS A BETTER GRID

- Enhanced Load Forecasting
- Targeted Infrastructure Investments
- Optimized Grid Operations
- Smarter Incentive Programs



THANK YOU



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