

ENERGY RESILIENCE FOR TOMORROW BUILDS SUSTAINABILITY TODAY

A resilient energy supply for critical municipal services can also help your community improve sustainability and lower energy costs

Honeywell Smart Power
for Cities



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HONEYWELL SMART POWER

Don't wait for extreme weather to dictate your energy strategy, or pricing. When your community proactively prepares for outages, you're better able to mitigate risk and keep critical services operating – such as emergency responders, communications, water, and wastewater. But the benefits go deeper: Honeywell Smart Power for Cities can also help you reduce utility demand charges, meet sustainability and emissions goals, and give you a single view of municipal operations.

ENERGY CHALLENGES ARE HERE

Rising energy costs, complicated utility billing, and expanding sustainability requirements are already challenging building operators and city decision makers.

More concerning is that experts in numerous fields – scientists, market analysts, investors, insurers, legislators – predict bigger changes ahead.

Energy shortages, heat waves, and extreme weather lead the news, and climate effects that were modeled for 25–50 years in the future are also emerging now.¹ In short: the frequency and cost of volatile weather and unstable grids are creating an urgent need to be better prepared.

Fortunately, the megatrend toward electrification is a promising response,^{2,3} with government agencies promoting the transition to “grid-interactive” buildings and cities that can adjust usage and power sources.⁴ Resilience funding is also being provided to help communities prepare for extreme weather.⁵

RESILIENCE IS A PLAN TO SUCCEED

Honeywell Smart Power for Cities is your operating system for energy resilience: Monitor grid status, utility rates, and weather to optimize the use of your local power-storage and power-generation assets.

The core software also integrates your municipal systems into a unified platform that helps bridge departmental silos to coordinate operations with greater clarity, day to day, and in emergencies.

First, we help you assess and prioritize needs. Then we prepare your infrastructure for three core capabilities – to integrate, control, and optimize power use.



INTEGRATE

Supply & demand beyond the grid

Clean sources of alternate power keep city services operational using technologies such as a microgrid with a Honeywell Experion™ control system and Honeywell battery energy storage. And as our clients can attest, our microgrids have kept them online even in extreme weather, like Superstorm Sandy.⁶



CONTROL

Adapt in real time

IoT integration and smart meters let you adjust demand and supply as needed, including distributed energy resources and savings initiatives like automated demand response. Severe-weather warnings identify infrastructure and areas likely to be impacted so you can prepare.



OPTIMIZE

Artificial intelligence analytics + automation

Honeywell Smart Power uses AI with machine learning to optimize microgrid operation during power-frequency fluctuations, utility service disruptions, and severe weather.

READINESS DRIVES RESULTS

From a foundation of integration, control, and optimization, Honeywell Smart Power gives you access to diverse capabilities across your community.

Keep critical services operational

- Build energy resilience with off-grid generation and storage, and the option to incorporate renewable sources
- Keep critical systems operating and recover more quickly from outages
- Dynamically manage loads to extend supply during storms, heat waves, or other prolonged extremes
- Plan for possible outages using severe weather alerts and analysis

Streamline municipal operations

- Get a unified view of operations across departments and services
- Improve response times without proportionate staffing increases
- Monitor energy use by system, and availability of backup energy
- Receive alerts when configurable usage thresholds are reached

Improve community sustainability

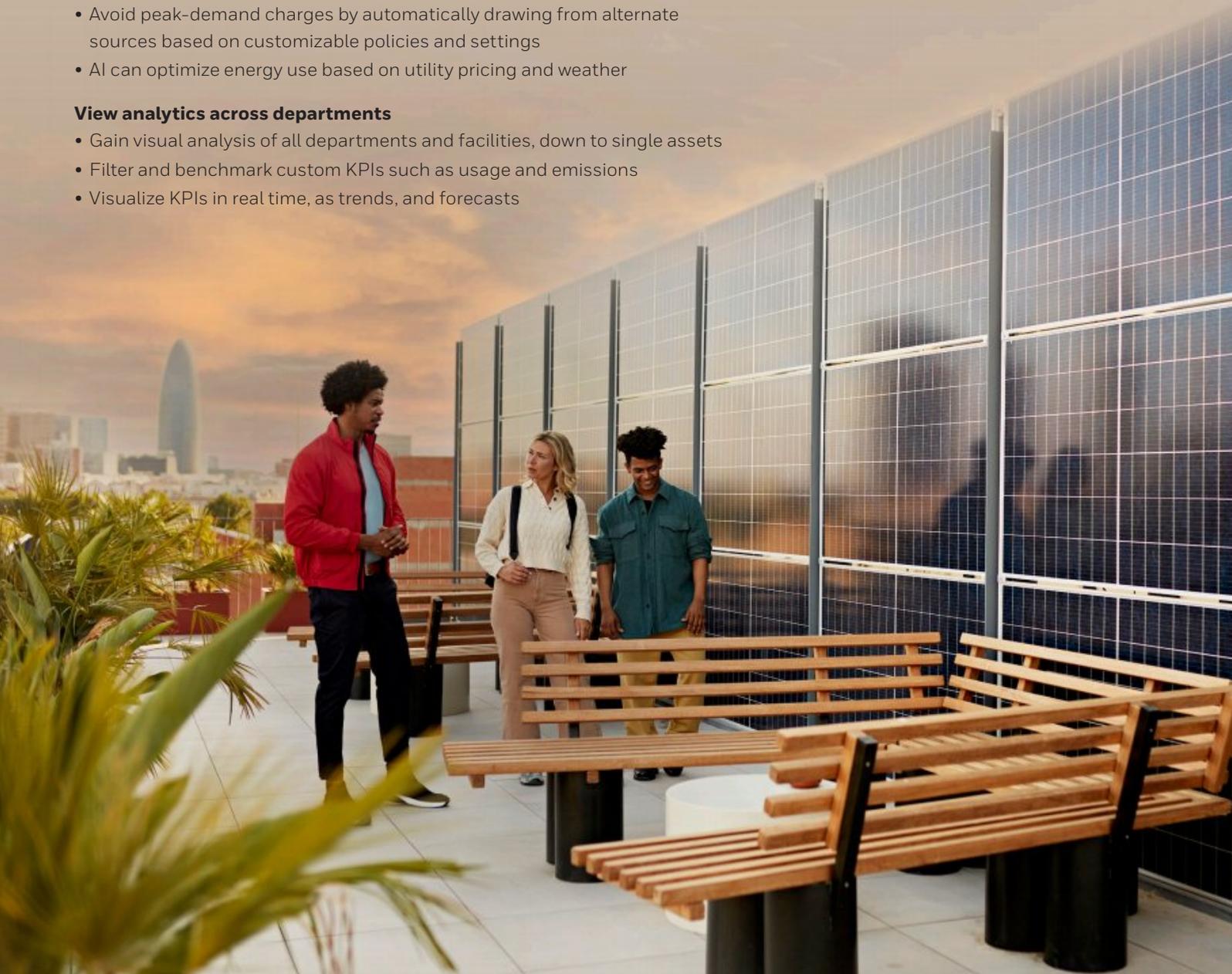
- Track energy, scope 1 & 2 emissions,⁷ and key performance indicators (KPIs)
- Off-grid generation, renewables, and storage can reduce emissions
- Leverage growing incentives for electrification of buildings, assets, and vehicles
- Document energy use and emissions for compliance and taxation

Optimize energy costs

- Participate in automated demand response
- Monetize surplus power
- Avoid peak-demand charges by automatically drawing from alternate sources based on customizable policies and settings
- AI can optimize energy use based on utility pricing and weather

View analytics across departments

- Gain visual analysis of all departments and facilities, down to single assets
- Filter and benchmark custom KPIs such as usage and emissions
- Visualize KPIs in real time, as trends, and forecasts





SOURCES

1. "[We haven't built for this climate.](#)" Axios, Freedman, Andrew, 2 August 2022. Accessed 12 October 2022.
2. "[Building Electrification Could Recharge Our Economy – And Save The Climate.](#)" Forbes, Baldwin, Sara, 20 September 2021. Accessed 12 October 2022.
3. "[Electrifying the future: Current trends, future pathways, and potential challenges.](#)" American Public Power Association, Zummo, Paul, 14 July 2022. Accessed 12 October 2022.
4. U.S. Department of Energy. "[Grid-Interactive Efficient Buildings Fact Sheet.](#)" Energy.gov, 24 April 2019. Accessed 12 October 2022.
5. The White House. "[FACT SHEET: Biden Administration Announces Nearly \\$5 Billion in Resilience Funding to Help Communities Prepare for Extreme Weather and Climate-Related Disasters.](#)" Briefing Room, 9 August 2021. Accessed 17 October 2022.
6. "[The Advanced Microgrid: Integration and Interoperability.](#)" Sandia Report SAND2014-1535 (pg. 43), Bower, Ward, et al., for Sandia National Laboratories. March 2014. Accessed 12 October 2022.
7. Scope 1 and 2 greenhouse gas emissions are measured using the latest standards from the Intergovernmental Panel on Climate Change's Fifth Assessment Report (IPCC AR5).

Transform energy resilience into community strength

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