# Kraken surpasses 2GW of managed domestic energy in world-leading virtual power plant



Kraken has reached a significant milestone by orchestrating over 2GW of power from a diverse range of domestic energy devices, including electric vehicles (EVs), home batteries, heat pumps, solar panels, and smart thermostats. This achievement establishes Kraken as one of the world’s largest and most advanced residential virtual power plants (VPPs), managing more than 500,000 connected devices in real time. The platform’s ability to dynamically schedule charging and heating operations allows it to optimise power use when the grid’s demand is low and energy is most abundant, cheaper, and greener. This not only reduces emissions but also alleviates strain on the electricity network, contributing to a more resilient grid.

Kraken's model of consumer-led energy flexibility is saving users upwards of $200 million annually, driven by its strategy to charge and heat homes during periods of low-cost, clean energy availability. The VPP effectively flattens peak electricity demand and supports local congestion management, which benefits the overall electricity system. This innovation fits into a broader transition to smarter and cleaner energy systems that empower consumers to drive change, cut costs, and support grid stability. Kraken has extended its impact by managing around half of the UK’s grid-scale batteries through a network of partnerships with utilities, energy suppliers, and energy traders.

Kraken’s leadership describes this development as a glimpse into the future of energy: smart, clean, and distributed. Amir Conrad, Kraken’s CEO, shared on LinkedIn that the milestone is “hard proof that consumer-led energy can be smarter, cleaner and more valuable.” The company continues to expand internationally, with recent partnerships including E.ON Next in the UK and MAINGAU Energie in Germany, as well as a strategic alliance with SolarEdge Technologies. This partnership aims to enhance access to low-cost, green energy for SolarEdge Home Battery customers worldwide by integrating Kraken’s technology to automate battery charging and allow users to sell excess energy back to the grid during peak times. Octopus Energy customers in both the UK and Texas are already benefiting from this initiative through access to competitive tariffs.

Beyond residential flexibility, Kraken also manages Europe’s largest battery energy storage system at Blackhillock in Scotland – a 200MW/400MWh asset owned by Zenobē and integrated with Kraken’s platform. This facility plays a crucial role in balancing supply from intermittent renewable sources and is planned to expand to 300MW shortly, capable of powering millions of homes and potentially lowering consumer bills by hundreds of millions of pounds over the long term. Additionally, Kraken has begun expanding its presence in the US market through a licensing deal with Tenaska Power Services, marking its first North American engagement. This collaboration aims to bring enhanced operational flexibility and grid stability to battery sites in Texas with the potential for broader portfolio management.

Kraken’s ongoing innovation also embraces broader industry collaboration, such as the Mercury Consortium, a public-private initiative aiming to create a common framework for integrating energy devices like EVs, heat pumps, and solar panels — often referred to as establishing a “Bluetooth for energy.” This effort reflects the company’s vision of a future energy ecosystem that is interconnected, consumer-focused, and environmentally sustainable. The milestone of crossing 2GW underlines Kraken’s accelerating role in the global energy transition, aiming to make cleaner, smarter power accessible for everyday consumers while supporting broader grid and environmental goals.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone), [[2]](https://www.current-news.co.uk/ai-powered-vpp-kraken-reaches-2gw-managed-domestic-assets/), [[3]](https://engineering.kraken.tech/news/2025/03/27/building-the-largest-ev-vpp-in-the-world.html)
* Paragraph 2 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone), [[2]](https://www.current-news.co.uk/ai-powered-vpp-kraken-reaches-2gw-managed-domestic-assets/), [[3]](https://engineering.kraken.tech/news/2025/03/27/building-the-largest-ev-vpp-in-the-world.html)
* Paragraph 3 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone), [[5]](https://www.businesswire.com/news/home/20240724918332/en/Kraken-and-SolarEdge-Light-up-Path-to-Cheaper-Cleaner-Energy), [[7]](https://solarquarter.com/2024/07/26/kraken-technologies-and-solaredge-announce-strategic-partnership-to-enhance-green-energy-access/)
* Paragraph 4 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone), [[4]](https://kraken.tech/press-releases/kraken-unleashes-europes-biggest-battery)
* Paragraph 5 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone), [[6]](https://kraken.tech/press-releases/energy-tech-giant-kraken-lands-first-us-licensing-deal-with-energy-manager-tenaska-power-services)
* Paragraph 6 – [[1]](https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://industrialnews.co.uk/krakens-virtual-power-plant-hits-2gw-milestone/?utm_source=rss&utm_medium=rss&utm_campaign=krakens-virtual-power-plant-hits-2gw-milestone> - Please view link - unable to able to access data
2. <https://www.current-news.co.uk/ai-powered-vpp-kraken-reaches-2gw-managed-domestic-assets/> - Kraken, Octopus Energy's AI-powered operating system, now manages over 2GW of domestic power from electric vehicles (EVs), home batteries, and heat pumps. This positions Kraken as one of the world's largest residential virtual power plants (VPPs). The platform connects to more than 500,000 devices, including solar panels and smart thermostats, and claims to save consumers over $200 million annually. Kraken also optimises large assets like grid-scale battery sites, contributing to a more resilient energy grid. The system schedules energy-intensive activities during low-demand times, offering consumers access to cheaper energy tariffs.
3. <https://engineering.kraken.tech/news/2025/03/27/building-the-largest-ev-vpp-in-the-world.html> - Kraken has developed the world's largest electric vehicle (EV) smart-charging virtual power plant, integrating over 270,000 controllable devices to provide more than 1.7 GW of flexibility to the electrical grid. This growth, from fewer than a thousand devices, underscores Kraken's commitment to accelerating the electrification of transportation and heating. The platform aims to reduce pollution by shifting EV charging to off-peak times when electricity is greener, thereby tackling climate change and improving air quality.
4. <https://kraken.tech/press-releases/kraken-unleashes-europes-biggest-battery> - Kraken has partnered with EDF Energy to manage Europe's largest battery energy storage system at Blackhillock in Scotland. The 200MW/400MWh facility, owned by Zenobē, is integrated with Kraken's platform, which now manages 50% of the UK's grid-scale batteries. The project aims to address stability issues from intermittent renewable generation, with plans to expand to 300MW by next year, supplying power to 3.1 million homes and potentially lowering consumer bills by £170 million over 15 years.
5. <https://www.businesswire.com/news/home/20240724918332/en/Kraken-and-SolarEdge-Light-up-Path-to-Cheaper-Cleaner-Energy> - Kraken and SolarEdge Technologies have announced a strategic partnership to provide low-cost, green energy for SolarEdge Home Battery customers worldwide. The integration allows customers to charge batteries with abundant, clean energy and sell excess back to the grid during peak times, all automated by Kraken. The first beneficiaries are Octopus Energy customers in the UK and Texas, who will access Octopus Energy’s 'Intelligent Octopus' tariffs, offering competitive rates up to 50% lower than standard tariffs.
6. <https://kraken.tech/press-releases/energy-tech-giant-kraken-lands-first-us-licensing-deal-with-energy-manager-tenaska-power-services> - Kraken has signed its first US licensing deal with Tenaska Power Services (TPS), an energy manager in North America. The initial implementation will manage certain TPS customer battery sites in Texas, with potential expansion across TPS's US portfolio. This collaboration aims to provide TPS with greater operational flexibility, enhance grid stability, and optimise revenue streams in the evolving energy landscape. Kraken's platform offers end-to-end management of the energy supply chain, from flexible energy device management to customer billing and support.
7. <https://solarquarter.com/2024/07/26/kraken-technologies-and-solaredge-announce-strategic-partnership-to-enhance-green-energy-access/> - Kraken and SolarEdge Technologies have announced a strategic partnership to enhance green energy access for SolarEdge Home Battery customers globally. The integration enables customers to charge batteries with low-cost, clean energy and sell excess back to the grid during peak times, all automated by Kraken. The first beneficiaries are Octopus Energy customers in the UK and Texas, who will access Octopus Energy’s 'Intelligent Octopus' tariffs, offering competitive rates up to 50% lower than standard tariffs.