

**NextGen NRG Group
Total Virtual Power
Plan (VPP) Solutions**

TG GEN



What is VPP?

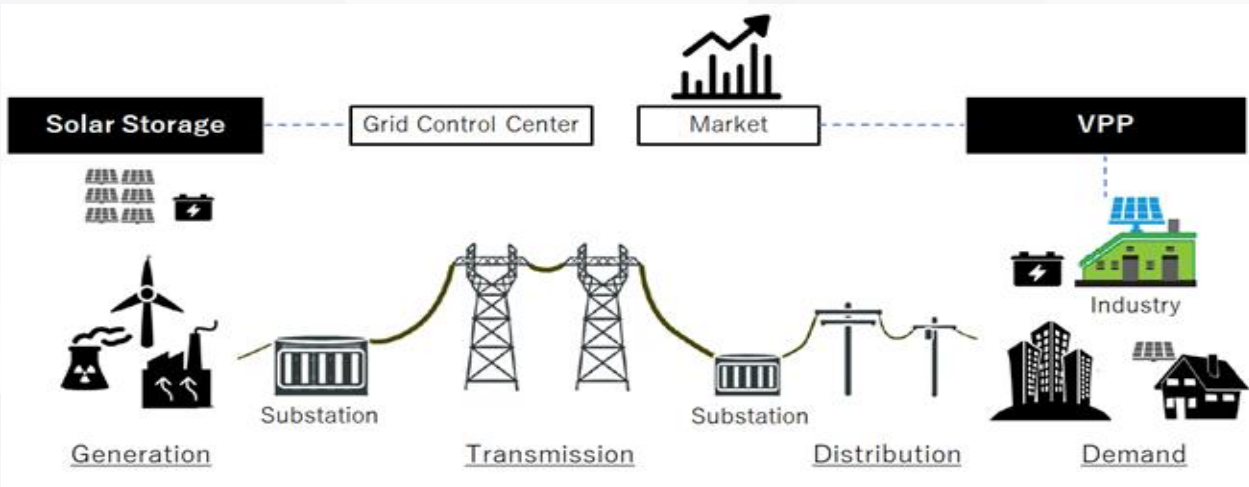
A system that relies upon software and a smart grid to remotely and automatically dispatch retail DER services to a distribution or wholesale market via an aggregation and optimization platform.

Formerly passive consumers can become “active prosumers” through participation in a VPP, allowing for the trading of energy, demand response and in other ways becoming “active participants in delivering services tailored to their needs and preferences that also serve the larger grid.

From expected annual market revenues in 2019 for VPPs of around US\$174.7 million, Navigant predicts a “surge” to a cumulative US\$6.2 billion by 2028 at a compound annual growth rate (CAGR) of 48.6%. From 2019’s installed capacity, which Navigant claims to be at 3,973.5MW, the VPP space will constitute 34,465.7MW by 2028, the research firm forecasts.



NRG All in One VPP Solutions-Hardware and Software



VPP Market Potential

Global cumulative energy storage installations

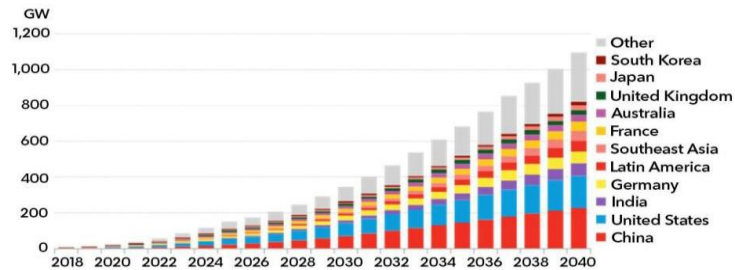
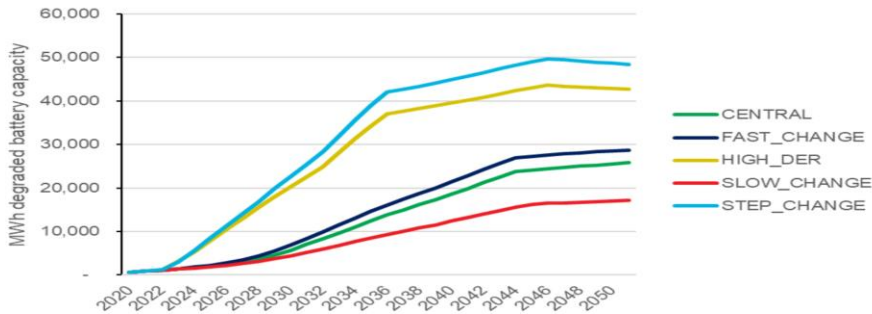
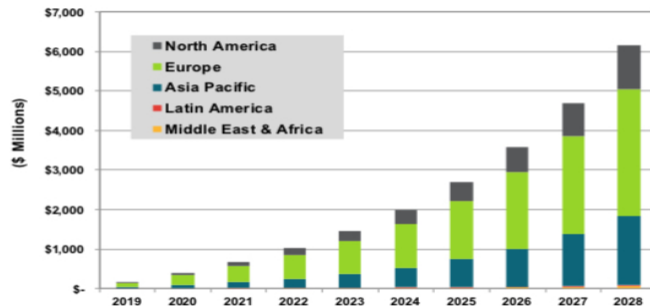
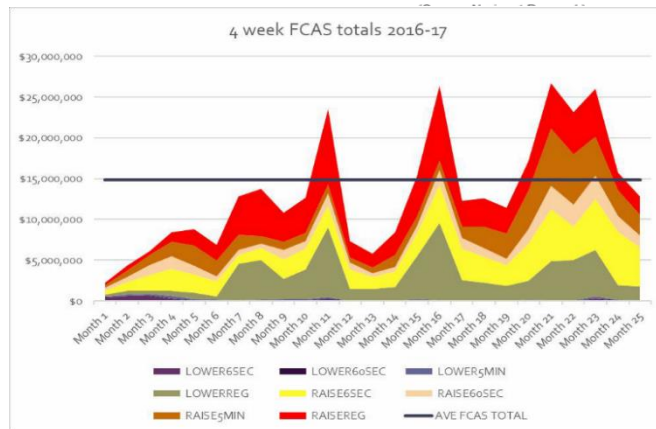


Chart 1-1. Total VPP Market Revenue, World Markets: 2019-2028



Green Energy Markets

Australia Energy Storage Market



Technologies and Patented IPs

VPP Platform

- Arbitrage: average daily net earning price of 6 x 5 mins (30 mins) dispatch
- Frequency Response
- Demand Response
- Peak shaving to reduce demand charge
- Enhanced asset management
- Using excess energy at one location to offset deficits at other locations
- Asset management
- Real time monitoring



Inverter IPs

- Soft Switching
- Bidirectional
- E-cap less
- Battery ↔ AC Single Stage
- Ultra high efficiency



DC-DC Converter IPs

- Bidirectional Full range Soft switching
- High Current
- Buck-Boost Operations



Redx Core Technologies



NEXTGEN NRG