# DOOSAN GRIDTECH
# Representative Global Energy Storage Experience

At Doosan GridTech, we are committed to driving economic growth and promoting environmental sustainability by advocating for a robust, low-carbon power grid. We specialize in empowering large-scale power producers to evaluate, secure, integrate, manage, and optimize energy storage systems. Our Battery Energy Storage Systems are designed for maximum impact, whether they operate independently or paired with solar or wind power.


**With a team of seasoned battery storage experts based in Seattle and Melbourne, we have successfully designed, procured, and implemented a variety of systems across the Americas and Asia-Pacific, totaling nearly 1 GWh in capacity.**

We emphasize adaptability in every phase of a project, ensuring that we meet our clients' unique needs. Our commitment is to deliver tailored solutions that align seamlessly with your objectives.

| Project | Client & Technology | Objectives | Use Cases |
|---|---|---|---|
| **Wave 1 Battery Supply**<br>Tampa, Florida<br>(100 MW / 200 MWh)<br>***In Progress*** | **Client:** Tampa Electric<br>**Battery:** Gotion Li-ion<br>**PCS:** SMA<br>**EMS:** DG-IC® | Procure and deliver BESS equipment and coordinate the BESS design and data with 3rd party EPC to support the design and installation of a complete, functional system. | Peak shifting, voltage support, reactive power support, ramp rate control, fast frequency response. |
| **Tailem Bend II BESS**<br>South Australia, Australia<br>(41.5 MW / 45 MWh) | **Client:** Vena Energy<br>**Battery:** CATL Li-ion<br>**PCS:** Power Electronics<br>**EMS:** DG-IC® | To counter the intermittent nature of solar generation and maximize the solar plant's profit while providing ancillary services to the National Electricity Market. | Fast frequency response, ancillary services, voltage support. |
| **Capital BESS**<br>Australian Capital Territory, AUS<br>(100 MW / 200 MWh)<br>***In Progress*** | **Client:** Neoen<br>**Battery:** CATL Li-ion<br>**PCS:** Power Electronics<br>**EMS:** DG-IC® | Use ESS for market participation and respond to frequency changes to prevent voltage and frequency collapse, and add competition to the markets which helps reduce consumer electricity prices. | Ancillary services, arbitrage, peak shaving, block/load shifting, renewable firming and smoothing, virtual inertia. |
| **Wandoan South ESS**<br>Queensland, AUS<br>(100 MW / 150 MWh) | **Client:** Vena Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** Power Electronics<br>**EMS:** DG-IC® | Market participation, standalone ESS, providing energy arbitrage and FCAS revenue. | Energy arbitrage, frequency control, ancillary services. |
| **Beacon Solar Plant ESS**<br>Mojave Desert, CA<br>(20 MW / 10 MWh) | **Client:** LADWP<br>**Battery:** Samsung Li-ion<br>**PCS:** SMA<br>**EMS:** DG-IC® | Deploy large-scale energy storage system to provide greater resiliency and reliability to electrical system grid and allow for greater utilization of existing solar plant. | Solar integration, frequency response services, local voltage support. |
| **Micanopy ESS Microgrid**<br>Micanopy, FL<br>(8.3 MW / 11.7 MWh) | **Client:** Duke Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** SMA | Deploy ESS with microgrid services to improve reliability for third-party energy user. Capture revenue from the southeast wholesale market to improve economics for investment. | Islanding, frequency regulation. |
| **Jennings ESS Microgrid**<br>Jennings, FL<br>(5.5 MW / 5.5 MWh) | **Client:** Duke Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** SMA | Deploy ESS with microgrid services to improve reliability for third-party energy user. Capture revenue from the southeast wholesale market to improve economics for investment. | Islanding, frequency regulation. |
| **Atterbury PV + S Microgrid**<br>Camp Atterbury, IN<br>(5 MW / 5 MWh) | **Client:** Duke Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** SMA<br>**EMS:** DG-IC®<br>**PV:** 2 MW array | Deploy mission-critical solar+storage system with microgrid services to improve reliability for Atterbury National Guard base. Capture revenue from the MISO Frequency Regulation market to improve economics for investment. | Islanding, frequency regulation. |
| **Nabb ESS Microgrid**<br>Nabb, IN<br>(5 MW / 5 MWh) | **Client:** Duke Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** SMA<br>**EMS:** DG-IC® | Use ESS to improve reliability to community. Capture revenue from the MISO Frequency Regulation market to improve economics for investment. | Islanding, frequency regulation. |
| **John Hopkins PV + S Microgrid**<br>St. Petersburg, FL<br>(2.5 MW / 18 MWh) | **Client:** Duke Energy<br>**Battery:** CATL Li-kon<br>**PCS:** Dynapower<br>**PV:** .8 MW array | Deploy ESS + PV with microgrid services to improve reliability for third party energy user. Capture revenue from the southeast wholesale market to improve economics for investment. | Islanding, frequency regulation. |

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| **Everett ESS**<br>Everett, WA<br>(2 MW / 7 MWh) | **Client:** Snohomish PUD<br>**Battery:** Vanadium Redox Flow<br>**PCS:** Siemens<br>**EMS:** DG-IC® and DERO® | Enable storage-based firming of renewable energy. | Energy arbitrage, peak shifting. |
| **Glacier ESS**<br>Glacier, WA<br>(2 MW / 4.4 MWh) | **Client:** Puget Sound Energy<br>**EMS:** DG-IC® | Improve service to a remote community. | Peak shaving, islanding, and frequency response. |
| **Hardeson ESS**<br>Everett, WA<br>(2 MW / 1 MWh) | **Client:** Snohomish PUD<br>**Batteries:** Mitsubishi & LG Li-ion<br>**PCS:** Parker Hannifin<br>**EMS:** DG-IC® and DERO® | Enable storage-based firming of renewable energy as part of broader ESS fleet optimization. | Peak shaving, renewables smoothing, energy arbitrage/ system flexibility. |
| **Mueller ESS**<br>Austin, TX<br>(1.8 MW / 3.2 MWh) | **Client:** Austin Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** Younicos<br>**EMS:** DG-IC® and DERO® | Deploy utility-owned energy storage to integrate 3 MW of community and rooftop solar PV at lowest-cost of load served as part of DOE SHINES program. | Distributed-solar integration, bulk power market services, local power quality support. |
| **Kingsbery ESS**<br>Austin, TX<br>(1.5 MW / 3 MWh) | **Client:** Austin Energy<br>**Battery:** LG Chem Li-ion<br>**PCS:** Parker Hannifin<br>**EMS:** DG-IC® and DERO® | Deploy utility-owned energy storage to integrate community and rooftop solar PV at lowest-cost of load served as part of DOE SHINES program. | Distributed-solar integration, bulk power market services, local power quality support. |
| **Horn Rapids ESS**<br>Richland, WA<br>(1 MW / 4 MWh) | **Client:** Energy NW<br>**Battery**: CATL Li-ion<br>**PCS:** Power Electronics<br>**EMS:** DG-IC® | Smooth the solar output, shift off-peak solar energy generation to times when the energy is needed, and help reduce peak energy demand. | Solar smoothing, firming, and shifting. |
| **Parkview ESS**<br>Kalamazoo, MI<br>(1 MW / 1 MWh) | **Client:** Consumers Energy<br>**Battery:** Samsung Li-ion<br>**PCS:** Ingeteam<br>**EMS:** DG-IC® | Deploy utility-owned energy storage system to support distribution circuit reliability and efficiency. | Peak shaving, voltage support. |
| **DHI Facility ESS**<br>Changwon<br>(12 MW / 70 MWh) | **Client:** SK E&S<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC® | Increase utility of solar by shifting production to high demand hours. | Peak demand management, energy arbitrage, solar power shifting. |
| **BSS ESS Phase 1 & 2**<br>Gyeongsan-bukdo<br>(3.8 MW / 12.2 MWh) | **Client:** BSS<br>**Battery:** LG Chem Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC® | Reduce energy costs by shifting solar energy production from four systems, using 5th ESS for peak shaving. | Energy arbitrage, peak shaving. |
| **Uiryeong PV + S**<br>Gyeongsan-bukdo<br>(3 MW / 8 MWh) | **Client:** BSS<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC®<br>**PV:** 3 MW array | Create REC Sales profit by charging and discharging of electricity from solar PV. | Energy arbitrage. |
| **Energy Storage System PV + S**<br>Changwon<br>(2.5 MW / 7.5 MWh) | **Client:** Future Energy<br>**Battery:** LG Chem Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC®<br>**PV:** 1.2 MW array | Reduce energy costs by shifting solar energy production from local solar PV. | Energy arbitrage. |
| **Jeungpyeong ESS**<br>Chungcheong-bukdo<br>(2 MW / 10 MWh) | **Client:** SK E&S<br>**Battery:** SK Innovation Li-ion<br>**PCS:** SMA<br>**Software:** DG-IC® | Reduce energy costs through peak shaving and energy arbitrage and create additional profit through demand response discharge. | Energy arbitrage, peak shaving. |
| **Naju PV + S**<br>Jellanam-do<br>(2 MW / 6 MWh) | **Client:** Ihan<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC®<br>**PV:** 2.6 MW array | Create REC Sales profit by charging and discharging of electricity from solar PV. | Energy arbitrage. |
| **Industrial PV + S Microgrid**<br>Changwon<br>(2 MW / 4.2 MWh) | **Client:** KOEN<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC®<br>**PV:** 0.1 MW array | Reduce energy costs by peak shaving and energy arbitrage in conjunction with solar PV. | Energy arbitrage, peak shaving. |
| **HQ Facility ESS**<br>Naju<br>(.8 MW / 2.4 MWh) | **Client:** Korea Power Exchange<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo PCS | Reduce energy costs through peak shaving and energy arbitrage. | Energy arbitrage, peak shaving. |
| **Changwon Learning Center PV + S**<br>Changwon<br>(.5 MW / 1 MWh) | **Client:** DHI<br>**Battery:** Samsung Li-ion<br>**PCS:** Plaspo<br>**Software:** DG-IC®<br>**PV:** 0.3 MW array | Reduce energy costs by shifting solar energy production from local solar PV. | Energy arbitrage. |