Tesla Gigafactory 1 Investor Event

January 4, 2017

Tahoe Reno Industrial Center – Sparks, Nevada

Gigafactory 1 (GF1): GF1 is the world's leading battery production facility, maintaining high efficiency and output while achieving the lowest capital investment per gigawatt hour (GWh) and the lowest production cost per kilowatt hour (kWh). The factory will produce cells, battery packs, energy storage products and vehicle components. Phase 2 construction, currently underway, will support annualized cell production capacity of 35 GWh and battery pack production of 50 GWh. The cell capacity represents more than the 2013 total global production of lithium-ion battery cells of all other manufacturers combined and supports the production of about 500,000 cars. Pack production capacity supports both our vehicle and energy product lines (Powerwall 2 & Powerpack 2).

Goals: To provide sufficient supply of battery cells to support high volume vehicle programs such as the Model 3 and to support the growth of our Energy and Solar product lines; to lower cell and battery pack capital investments and cost per kWh; and to accelerate innovation in cell design and related manufacturing processes to further reduce energy storage costs.

Design philosophy: The GF1, engineered as a singular product, is designed as a highly automated, integrated system intended to be replicated at other locations around the world. The facility is highly flexible to accommodate improvements in energy storage chemistries and packaging configurations, with limited stranded asset risk. GF1 is also scalable so that capital investments can be added as growing demand drives the need for further output.

Sustainability: GF1 is an all-electric factory with no fossil fuels (natural gas or petroleum) directly consumed. We will be using 100% sustainable energy through a combination of a 70 MW solar rooftop array and solar ground installations. The solar rooftop array is ~7x larger than the largest rooftop solar system installed today. All-electric allows for greater efficiency in the factory itself along with zero carbon emissions. A large portion of building heating is provided by waste heat recovered from production processes. Gigafactory's closed-loop water supply system uses six different treatment systems to efficiently re-circulate about 1.5 million liters of water, representing an 80% reduction in fresh water usage compared with standard processes. Construction is underway for an on-site recycling facility that will safely reprocess all types of Tesla battery cells, modules, and packs, into various metal products for reuse in new cells.

Partnership model: GF1 is the result of a partnership between Tesla and Panasonic, a relationship that began in 2006. Panasonic brings experience in high volume cell manufacturing, while Tesla provides creative, first principles thinking, clear vision, a rapid pace of execution, and the end product design and demand. Additionally, we've entered into agreements with the State of Nevada and Storey County for multiple tax abatements, and new agreements are being added as the factory scales. For example, a German battery component manufacturer recently began producing battery cell cans (outer metal cell case) on site.

How we lower GF1 capital investment per GWh: We attack operational cost on every front.

1. Increase facility production density and accelerate throughput
2. In-house design & build construction approach
3. Thoughtful facility systems and equipment design, layout and implementation
4. Innovative construction techniques to reduce land, construction, infrastructure, materials and labor costs

How we lower cell and battery pack cost per kWh: We attack cell and battery pack cost on every front.

1. Domesticating production to reduce tariffs and input costs (elements, components, labor, energy, water)
2. Re-engineer the entire supply chain as a function of higher production volume and tailored component requirements, while reducing transportation costs.
3. Improved cell design to increase cell level energy density, optimized cell size (2170 vs 18650)
4. Improved module and pack design to increase pack-level energy density
5. Increasing automation and process design to enhance yield, reduce scrap cost and improve in-field reliability
6. Lowering capital investment/GWh to reduce depreciation costs

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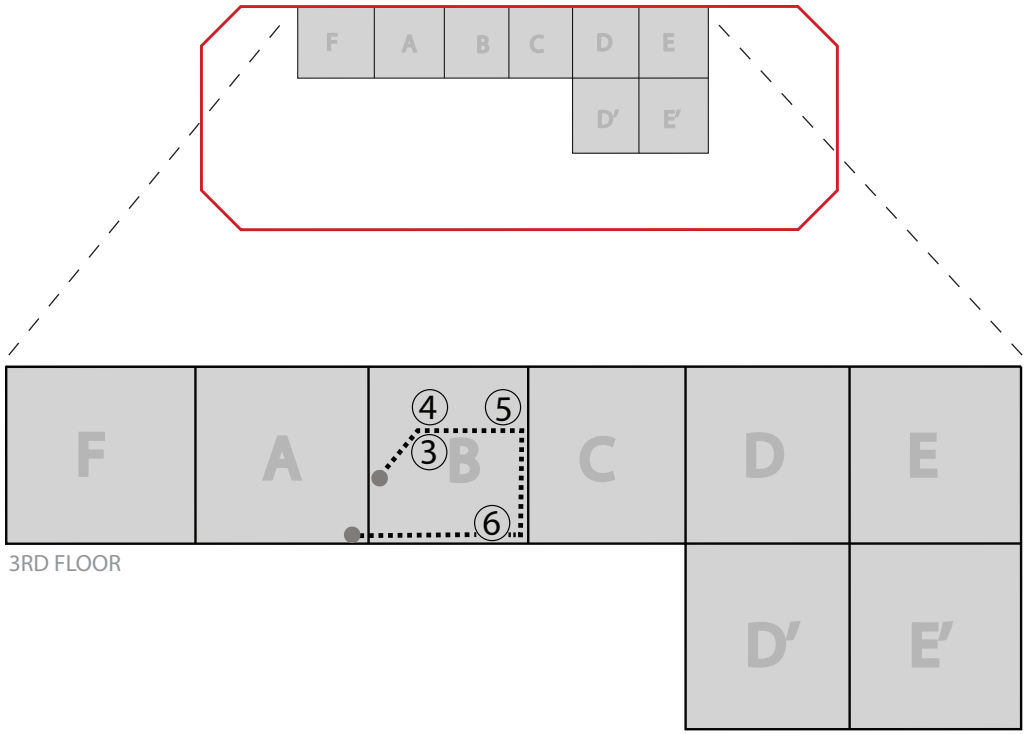
TOUR ROUTE

TOUR TIME : 45 MINUTES

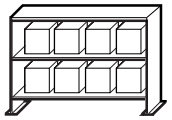


GIGAFACTORY 1

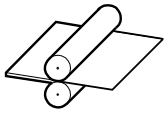
CELL PRODUCTION

MIX

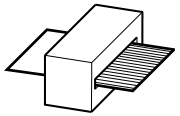
COAT



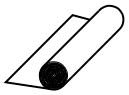
PRESS



SLIT



WIND



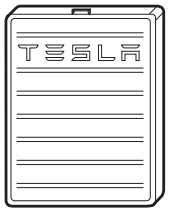
CAN/CAP

ASSEMBLE
(STOP 4 + 5)

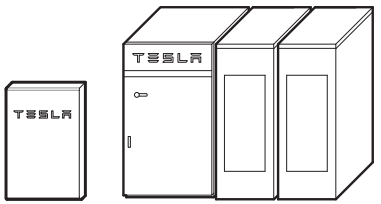
CHARGE
(STOP 3+ 6)

STORAGE
(STOP 2)

MANUFACTURING



MODEL 3 BATTERY PACK
(STOP 1)



ENERGY STORAGE PRODUCTS
(POWERWALL + POWERPACK)