

Sodium-Ion Batteries Hit Commercial Scale in 2026

Data & Equipment Brief

Sodium-ion shipments reached ~9 GWh in 2025 (+150% YoY). With CATL's 60 GWh HyperStrong order, HiNa and BYD lines ramping, and storage cells crossing 300 Ah, the chemistry has moved from lab curiosity to commercial reality. Figures are drawn from the IEA Global Energy Review 2026, CATL and BYD disclosures, and industry research (ICC Xinluo, SPIR).

1. The 2026 inflection at a glance

- Global sodium-ion shipments ~9 GWh in 2025 (+150% YoY); 2026 forecast 25-27 GWh; >580 GWh by 2030 (SPIR).
- China output 3.45 GWh in 2025 (+96% YoY, ICC Xinluo); combined Chinese planned capacity now >200 GWh.
- Cell cost 2025 ~0.52 yuan/Wh -> 2026 0.45-0.50 yuan/Wh, closing on LFP (0.48-0.55); ~0.25 yuan/Wh by 2030.
- USD cell cost 2026: sodium \$70-120/kWh (CATL ~\$77/kWh Gen-2) vs LFP \$70-80/kWh; \$40-50/kWh by 2027-28.
- IEA: >95% of announced 2030 sodium-ion capacity is in China - the supply chain is real but concentrated.

2. Sodium-ion vs LFP vs NMC (2026 commercial)

Criterion	Sodium-Ion (2026)	LFP	NMC
Energy density (cell)	160-175 Wh/kg (Naxtra 175)	140-180 Wh/kg	200-250 Wh/kg
Cycle life	4,000-10,000+ (CATL 10,000)	6,000-10,000	1,000-2,000
Operating temp	-40 to +70 C	-20 to +60 C	-20 to +55 C
Thermal-runaway onset	~210 C	180-220 C	150-180 C
Cell cost 2026 (China)	\$70-120/kWh	\$70-80/kWh	\$90-130/kWh
Raw-material risk	Minimal (Na ~1000x abundant)	Moderate (lithium)	High (Ni / Co)

3. 2026 capacity & production milestones

Company	2026 status	Capacity / milestone
CATL (Naxtra)	Fuding line operational; delivery Q3 2026	40 GWh Fujian expansion; 60 GWh HyperStrong order; ~149 GWh site plan
HiNa Battery	Fuyang line operational (4 lines since Oct 2025)	10 GWh today -> 30 GWh by 2027
BYD	Xuzhou plant, Q4 2026 mass production	30 GWh; 3rd-gen 160-170 Wh/kg, 10,000+ cycles, 200 Ah
Gotion (Natrium)	Unveiled May 2026; Q4 2026 mass production	160 Wh/kg, ~15% cheaper than LFP
EVE Energy	First sodium ESS grid-connected Sept 2025	2 GWh project (Dec 2025)
REPT BATTERO	Long-duration ESS cells	320 Ah, 20,000 cycles

4. Five line specs the capacity wave demands

- Format-flexible welding: large prismatic sodium cells (300+ Ah, blade-style BYD) on lines that also serve LFP.
- Stacking & compression fixtures for large prismatic storage cells (300-320 Ah).
- Formation, grading and aging capacity - the bottleneck as domestic sodium cells begin flowing.

- Integrated test + BMS with machine-readable per-unit traceability (bankable data for utilities & OEMs).
- Module / pack assembly now - the sellable unit for storage and two-wheeler packs; chemistry-agnostic.

Specifying a sodium-ion or LFP line? Contact NEGUP MACHINE - WhatsApp +86 153 0769 0902 ·
rain@negupgroup.com · www.negupmachine.com