

DECODING INDIA'S EV MINERAL GAP

Why batteries, not just vehicles, will decide
India's EV future





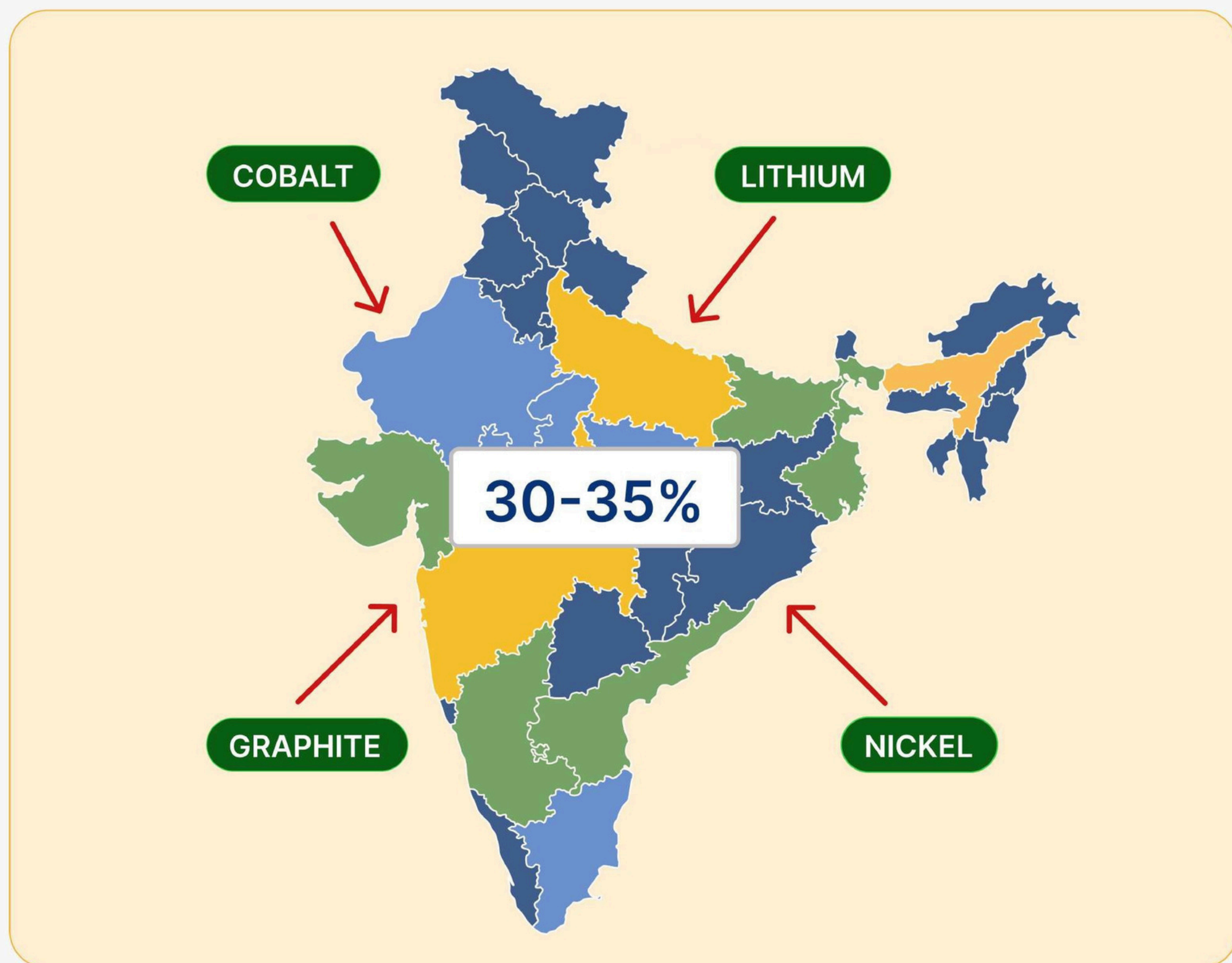
➤ THE EV PARADOX

India's EV market is growing fast

But over **60–100% of key battery minerals are imported.**

EV manufacturing is only 30–35% localised, leaving the transition exposed to:

- Geopolitics
- Supply disruptions
- Price shocks



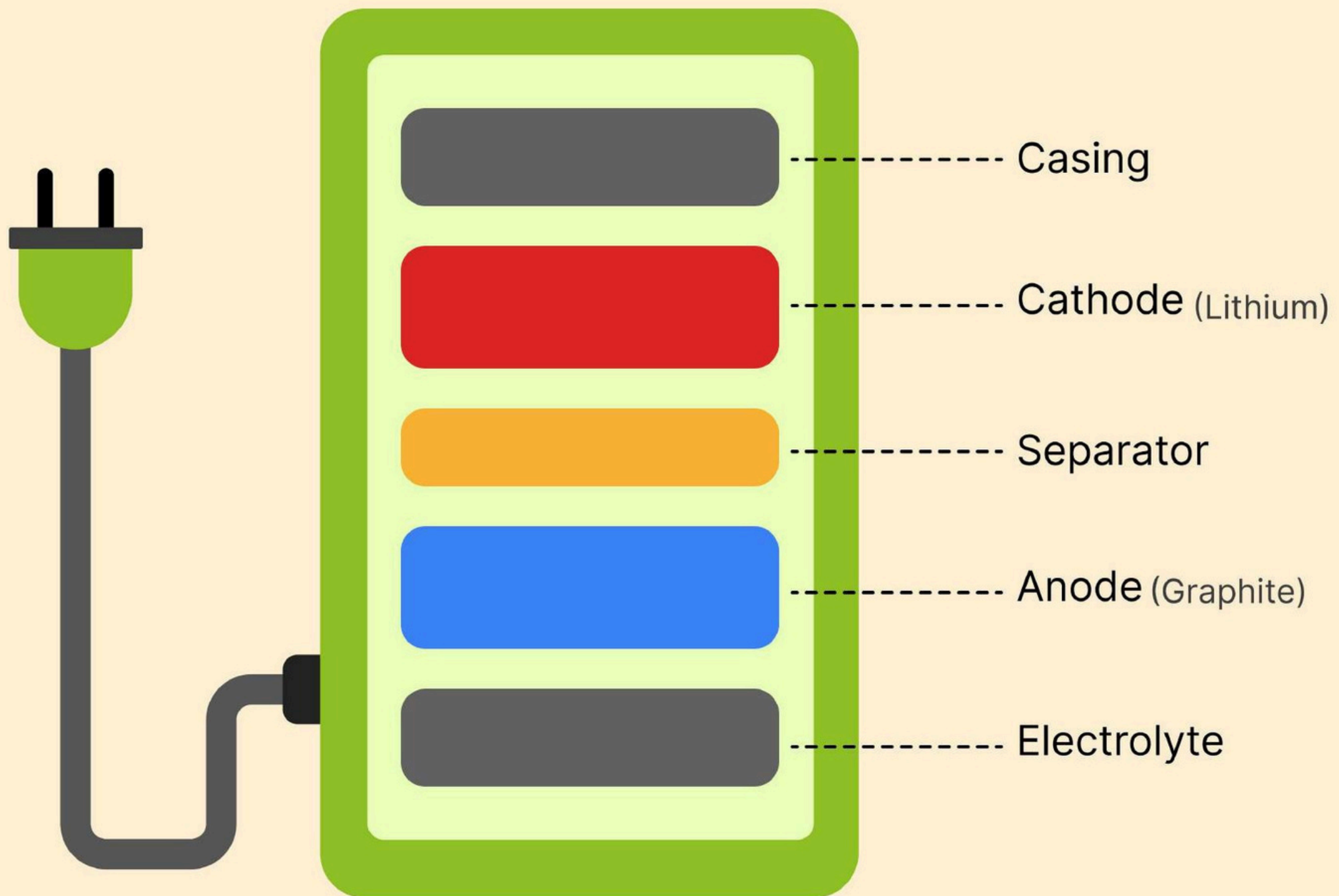


➤ WHAT MAKES A BATTERY STRATEGIC

A battery isn't just hardware

70% of its value comes from materials and manufacturing.

A single 60 kWh EV battery needs **~185 kg of minerals**



185
kg of minerals

70%
minerals value



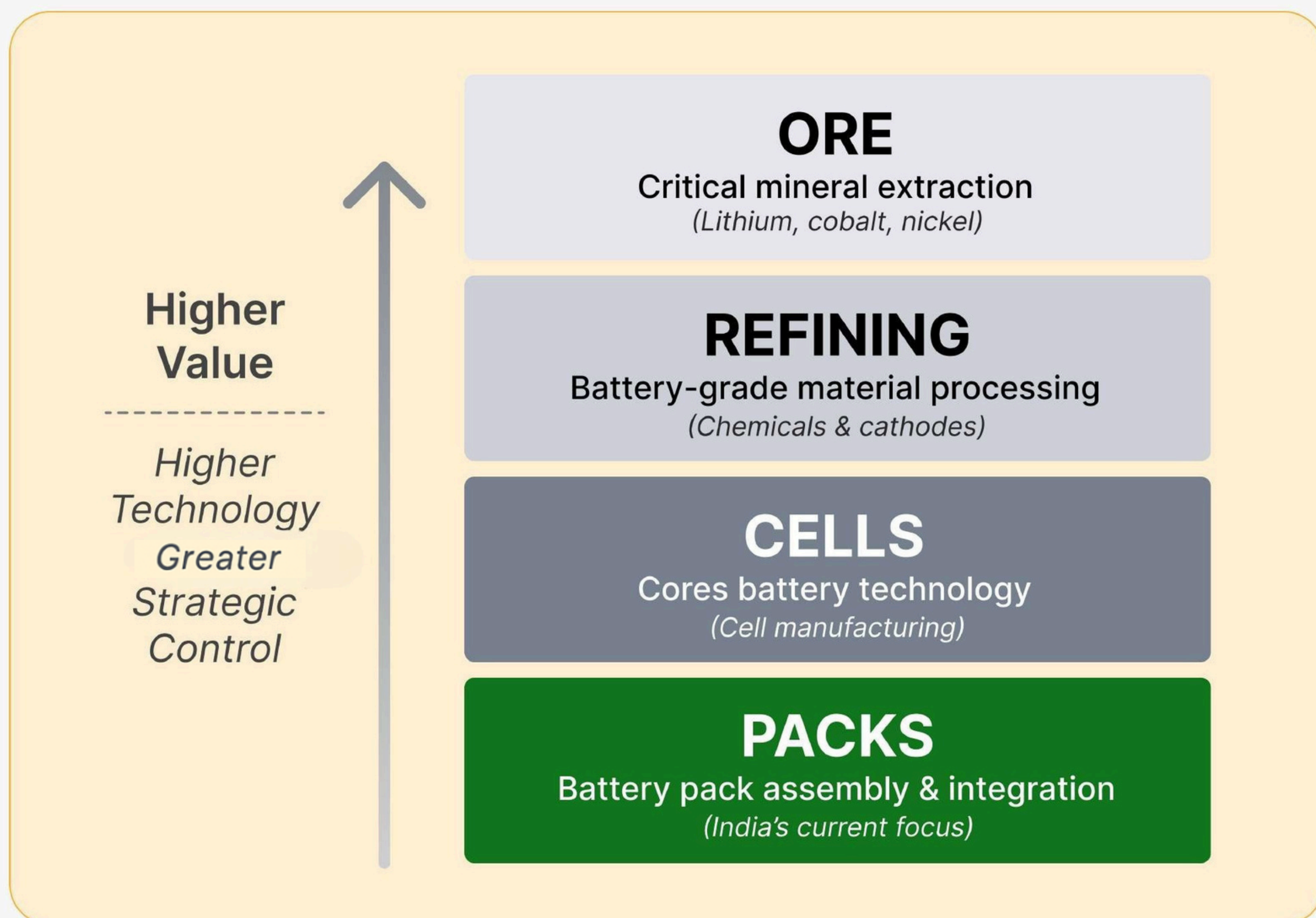
➤ WHERE INDIA IS MISSING VALUE

India is largely absent from:

- ✗ Mineral refining
- ✗ Chemical processing
- ✗ Cell manufacturing

That's where **most value is created**

Even if India secures raw ore at a low cost, it still imports **high-cost battery-grade materials**.





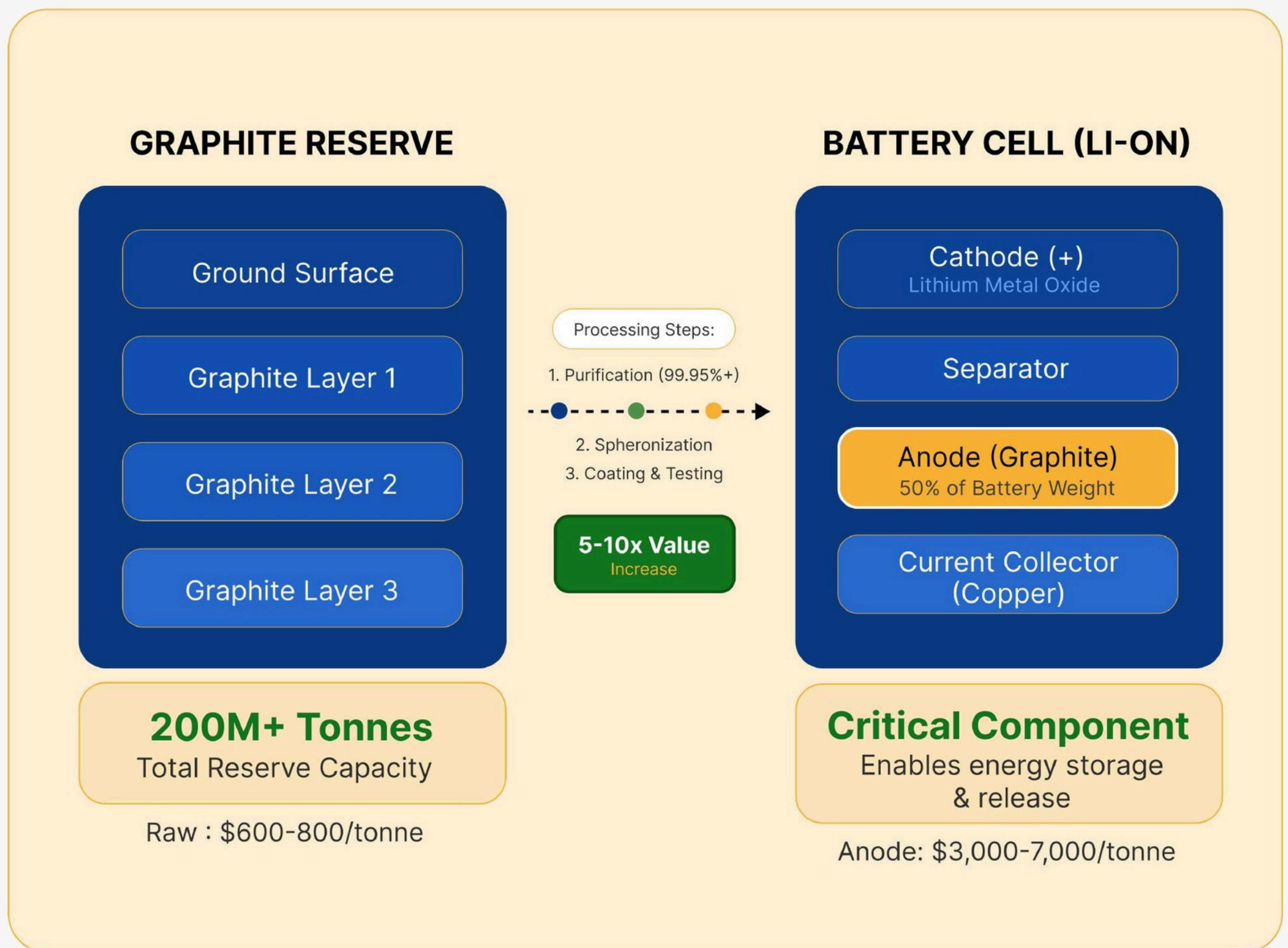
➤ THE IMMEDIATE OPPORTUNITY

India holds **over 200 million tonnes of graphite reserves**

If battery-grade graphite processing is developed:

- ✓ The anode (largest battery component) can be secured domestically
- ✓ Import risks reduce
- ✓ The supply chain becomes more resilient

This is India's most achievable near-term lever.





THE BIGGER QUESTION

Without domestic processing and refining:

➤ EV goals risk staying theoretical

➤ Value addition stays offshore

➤ Strategic dependence deepens

India's clean energy future depends on localising the battery value chain, not just assembling it.

Read the full blog for the complete analysis on www.csiglobal.co