

02 TUPION

01 BRIEF DESCRIPTION OF THE PROJECT

Tupion aims to produce lithium-ion and nickel batteries for electricity storage systems (**BESS**), focusing on off-grid systems and on-grid ancillary services. The annual production capacity will be 8GWh.

02 JUSTIFICATION AND OPPORTUNITY

In recent years, two central issues have gained prominence in the energy sector: **curtailment** (waste of surplus energy) and the limitation of the **flow** margin in the National Interconnected System (SIN), which prevents the connection of loads such as **green hydrogen** and **datacenters**. The solution to both problems is **energy storage**. To make the opportunity official, there is a battery power auction scheduled for 2026, which will generate large-scale demand for batteries, especially in the Northeast, a region with high availability of surplus energy.

03 INVESTMENT NEEDED

An investment of around US\$ 2 billion is estimated, with operations starting in year 2. The amount is earmarked for setting up the plant, acquiring machinery, training staff and distribution coordination for initial service to the Northeast.

04 EXPECTED RETURN

With this, the project aims for a payback of 7 years (Conservative), 5 years (Intermediate) and 2 years (Optimistic). An annual net cash flow of USD 300 million (Conservative), USD 460 million (Intermediate) and USD 1,180 billion (Optimistic).

| Conservative | Intermediate | Optimistic |
|-----------------|---------------------|------------------|
| No incentives | No incentives (EPZ) | Incentives (EPZ) |
| Max. cost | Min. Cost | Min. Cost |
| Min. sale | Min. Sale | Max. Sale |
| 14.47% per year | 22.18% per year | 53.74% per year |

05 SOCIAL AND ENVIRONMENTAL IMPACT

The project contributes directly to UN SDGs 7, 9 and 13. It is expected to generate more than 500 direct jobs and 1,500 indirect jobs, with a focus on regional inclusion and technical qualifications. In environmental terms, the plant will play an essential role in reducing emissions, helping to prevent the release of up to 30,000 tons of CO₂ per year.

CONTACTS

More information about
this and other projects:

investinbrasil@apexbrasil.com.br