ALUM INVESTMENT PROGRAM 2023

The Investment Program of ALUM SA for the year 2023 involves minimal but strictly necessary costs for:

- Ensuring operational continuity by extending the life of the Red mud pond and fulfilling the conditions of the environmental agreements with which ALUM has to comply;
- The continuation of the consolidation works at the precipitation vessels, carrying out the consolidation works of the White Filtration building and preparation of the expertise and the project necessary for the rehabilitation works of the transformer station (PT 7, 8 and 12) within the White Filtration building;
- Increasing the operational safety of the static and dynamic equipment necessary for the activity of the ALUM departments;
- Increasing the safety in operation and observing the ISCIR norms in force;

Executive Summary:

ALUM's investment program for the year 2023 requires a total estimated budget of **1,050,000 USD** and contains 6 investment projects,

USD'000

Company	***No. of investment projects***	***Necessary Capex***
		2023
ALUM SA Tulcea	***6***	***1,050***

The 6 investment objectives of the Investment Program of ALUM SA for 2023 are structured in two chapters as follows:

- Chapter 1 - Environmental projects to ensure operational continuity – includes 2 investment objectives with a necessary forecasted budget of **250 ths. USD**;

- Chapter 2 - Projects for ensuring the operating conditions and production process safe continuity – includes 4 investment objectives with a necessary forecasted budget of **800 USD**.

The capacity of performing investments is decisive for the future of ALUM SA and the evaluation of investments is a very important task for ALUM S.A.

The main key aspect of investments request is financial evaluation and budgeting the investments objectives spending.

Financial effort of these investments will be assured both by internal financial resources and by loans, like leasing financing or credits.

Chapter 1 – Environmental projects to ensure operational continuity

Includes a number of 2 investment projects absolutely necessary mainly for:

- rehabilitation of the humidification system and installing shading nets at the Red mud pond necessary to reduce the effects of the dust phenomenon;
- ensuring the operational continuity of the pond (and of the plant) for a period of time of at least 10 years by purchasing 27 + 11 hectares of land, land that was purchased in 2022, and the completion of the studies related to the expansion of the Red mud pond;
- ensuring the continued safe storage of the red mud and according to the provisions of the Integrated Environmental Authorization held by ALUM Tulcea;

Objective Code	Objective name
D-072.22.SRR.01	**Increasing the storage capacity of the red mud pond by elevating the dikes throughout the perimeter +51mdm** This investment objective is necessary for the rehabilitation of the humidification system and installing shading nets at the Red mud pond in order to reduce the effects of the dust phenomenon. The total estimated budget for the year 2023 is **50 thousand USD**.
D-083.21.SRR.01	**Extending the surface of the red mud pond and securing the red mud storage in the S + SE area** This investment objective is scheduled to be completed in December 2023 and is necessary to ensure the operational continuity of the pond (and of the plant) for a period of time of at least 10 years by purchasing 27 + 11 hectares of land, land that was purchased in 2022, and the completion of the studies related to the expansion of the Red mud pond. The total estimated budget for 2023 is **200 thousand USD**.

Chapter 2 – Projects to ensure the operating conditions and the safe continuity of the production process

It includes a number of 4 absolutely necessary investment projects mainly for:

- replacement of spare parts belonging to used equipment that no longer have the functional characteristics for which they were initially purchased;
- increasing the safety in operation of static and dynamic equipment necessary for the activity of ALUM departments;
- increasing the safety in operation and observing the ISCIR norms in force;
- prevention of possible incidents and accidental stops due to the deterioration in time of the erasures from the foundations of the Precipitation vessels;
- ensuring the operation of the White Filtration installation by rehabilitating the transformer stations, thus eliminating the very high risk of major damage;

Objective Code	Objective name
D-092.23.ALM.01	**Energy efficiency of Alum S.A. by installing a photovoltaic park within Alum S.A.** The purpose of the project is the purchase, installation and commissioning of a photovoltaic system. The total budget for this investment objective in 2023 is **160 thousand USD**.
D-070.23.ALM.01	**Maintenance Capex 2023** The objective is expected to be completed in December 2023 and consists of: ➢ ensuring the constructive conditions for increasing the filtration capacity, the competitiveness and the quality of the alumina produced; ➢ increasing the safety of Alum personnel in accordance with the environmental and safety requirements in effect; ➢ prevention of possible incidents and accidental shutdowns due to the damage in time of the erasures from the foundations of the Precipitation vessels; ➢ ensuring the operation of the White Filtration installation by rehabilitating the transformer stations, thus eliminating the very high risk of major damage. The total budget forecast for this objective in 2023 is **490 thousand USD**.
D-071.23.ALM.01	**PPE 2023** The total budget for this investment objective in 2023 is **50 thousand USD**. The investment objective consists in the replacement of some parts, which no longer have the initial functional characteristics, which were or are to be acquired.
D-066.23.ALM.01	**Endowments 2023** The total budget for this investment target in 2023 is **100 thousand USD.** The investment objective consists in the endowment with strictly necessary equipment that have been or are to be purchased. ➢ Automated system for packing and labeling bags; ➢ Pneumatic pick hammers; ➢ Technological flow video subsystems;

The net budget requested for approval is 1,050,000 USD.

The key decisions necessary to be taken for investment plane implementation are as follows:

- approval of the Investment Program for 2023;
- the development of the Investment Program according to a detailed schedule;
- establishing and approving detailed action plans for each investment project.

C. A. President of ALUM SA TULCEA
PhD. Eng. Gheorghe Dobra

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