

# Energy saving and costs reduction through replacement of oxygen generation plant



## CLIENT

- One of the major producers and installers of boilers for thermal power stations in Mongolia. The provided services include boiler maintenance and repairing. Moreover, the Company during last years has performed activities in oxygen production, which is provided to different local entities in Ulaanbaatar.

## PROJECT

- The company has identified an energy saving opportunity through the replacement of the old soviet age oxygen generation equipment with a new and more efficient one. The new technology allows a very significant energy saving (around 60%), compared to the old configuration, mainly due to reduced installed power of the major plant components (compressor, cryogenic expander and air separation unit).

## FINANCIAL STRUCTURE

- Loan USD 350,000

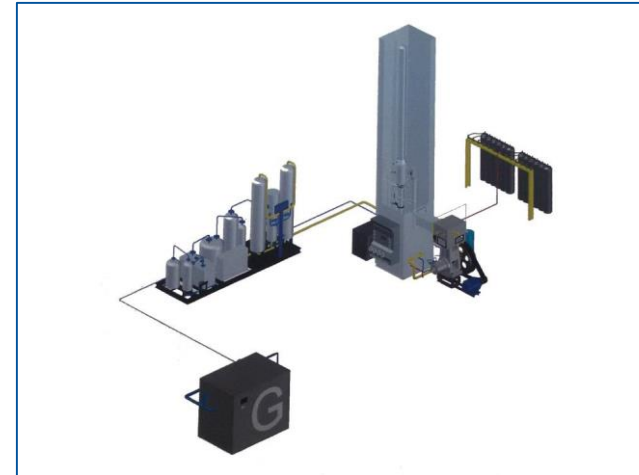
## TECHNICAL ASSISTANCE

- The MonSEFF team visited the company and, based on the gathered data, calculated the energy and cost savings related to the investment.

**DONOR:** EBRD Special Shareholder Fund



**European Bank**  
for Reconstruction and Development



## EXPECTED IMPACT

- Payback period: 6 years
- Internal rate of return (IRR): 17%
- Energy saving: 1,749 MWh/year
- Costs Saving: 42,805 USD/year
- Carbon emission reductions: 560 tonnes per year
- Other benefits: Reduced maintenance costs, lower failure and reduced unexpected interruptions, water saving, improved product quality