



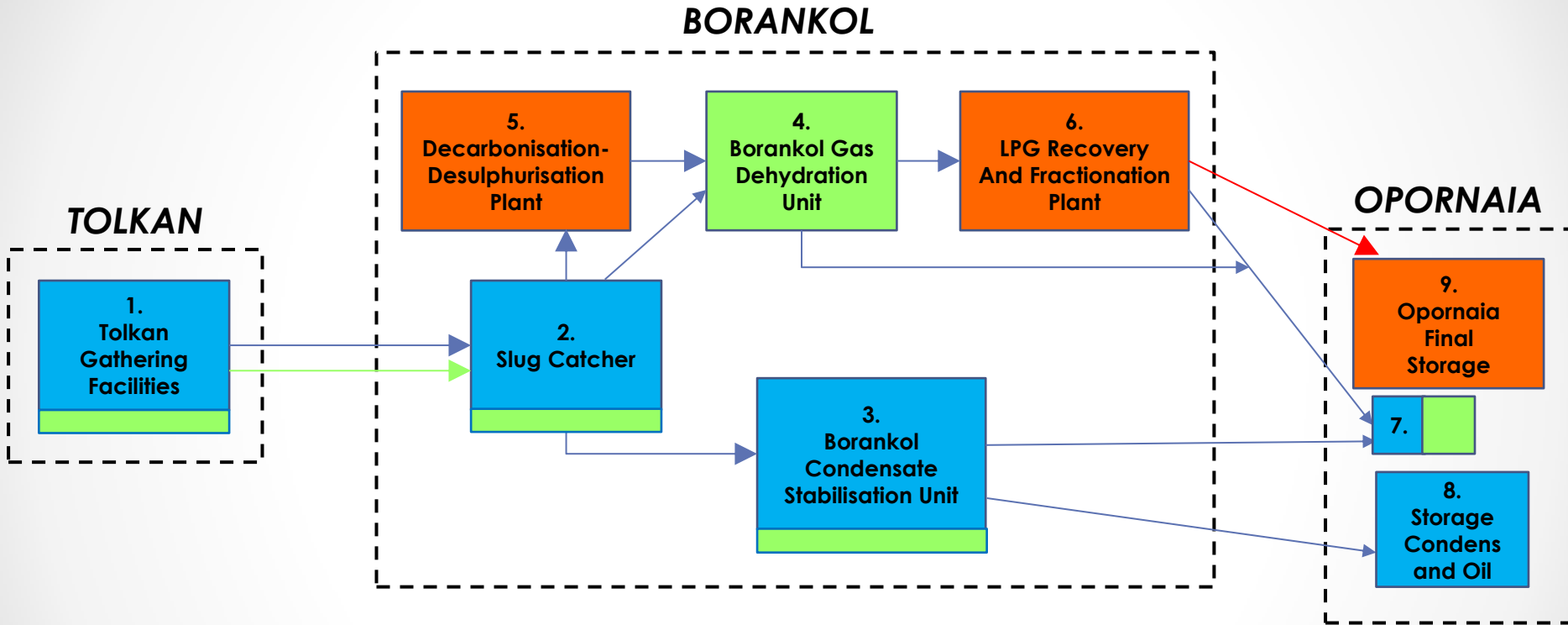
# WORKS PERFORMED IN KAZAKHSTAN

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Gas Treatment Plant - Borankol

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## BLOCK DIAGRAM



### LEGEND

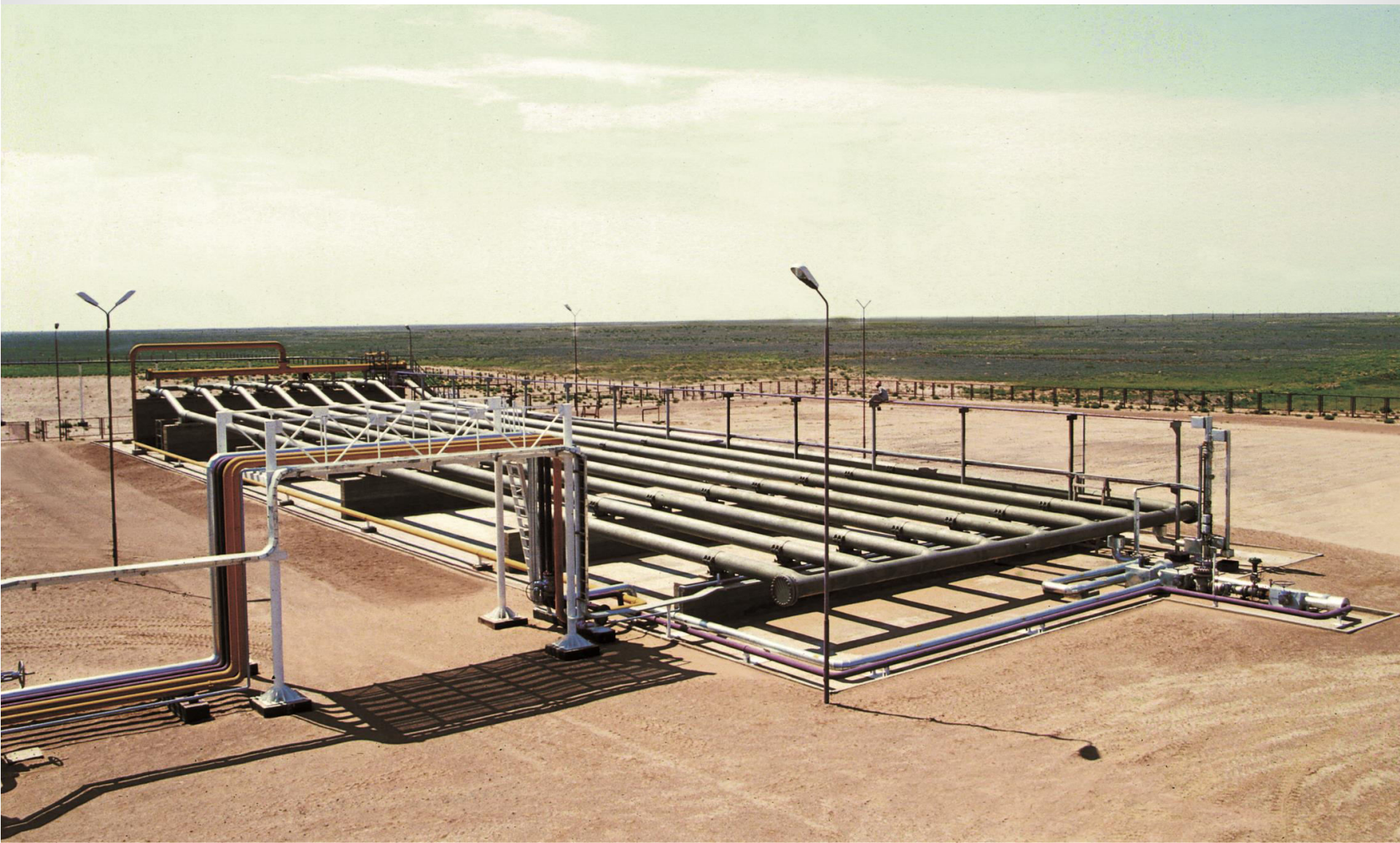
- Step I** gas 3mil Nmc/day, condensate 700 to/day
- Step II** gas 10mil Nmc/day, condensate 1400 to/day
- Step III** LPG: propane 360 to/day, butane 200 to/day, C5+ 200 to/day

## Pig Trap Launcher - Borankol



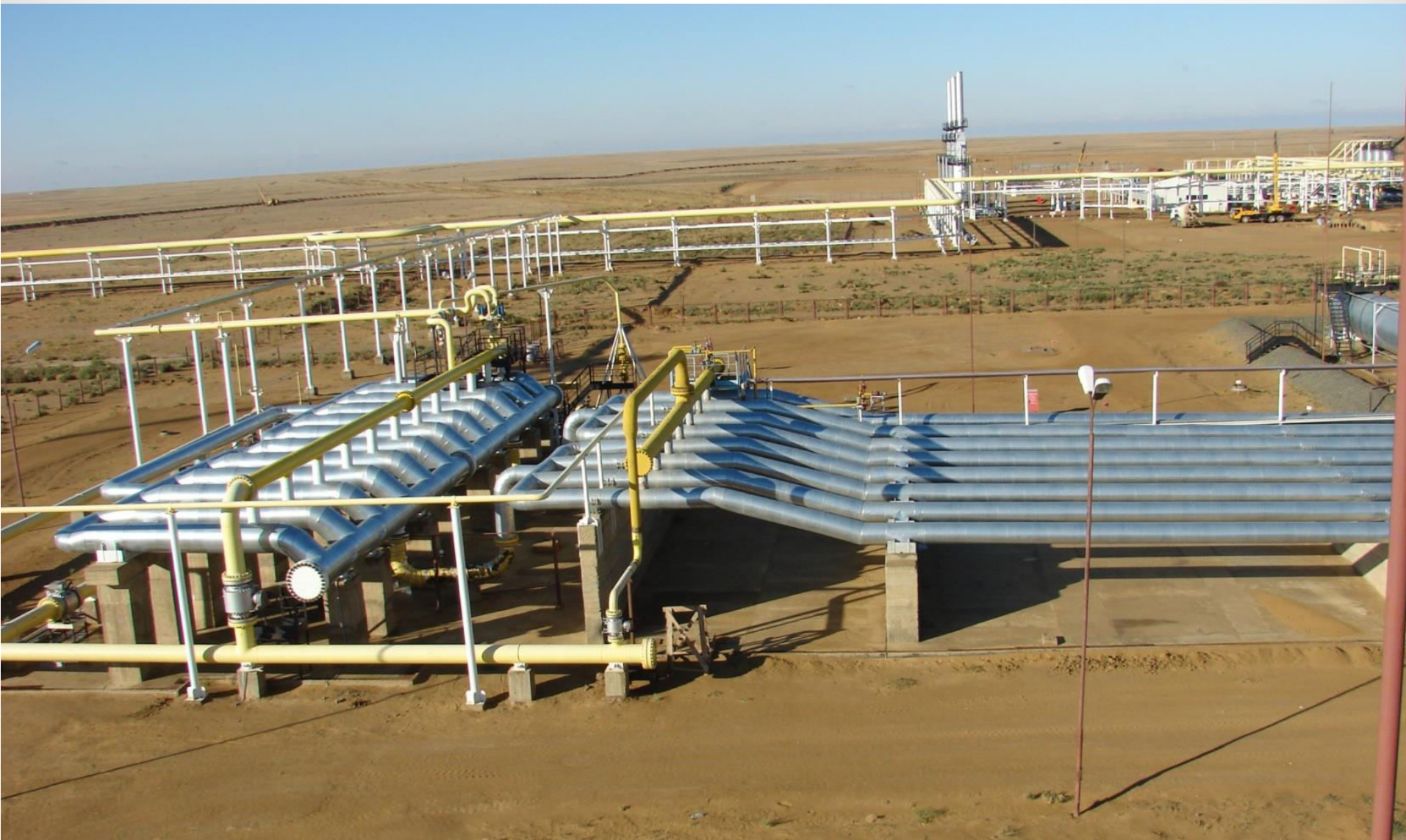


## Slug Catcher – Borankol Step I





## Slug Catcher – Borankol Step II (Upgrade)





## Slug Catcher – Borankol Step II (Upgrade)









## Gas Dehydration and Condensate Stabilisation Unit – Borankol Step I





## Condensate Stabilisation Unit – Borankol Step II





## Gas Dehydration Unit – Borankol Step II



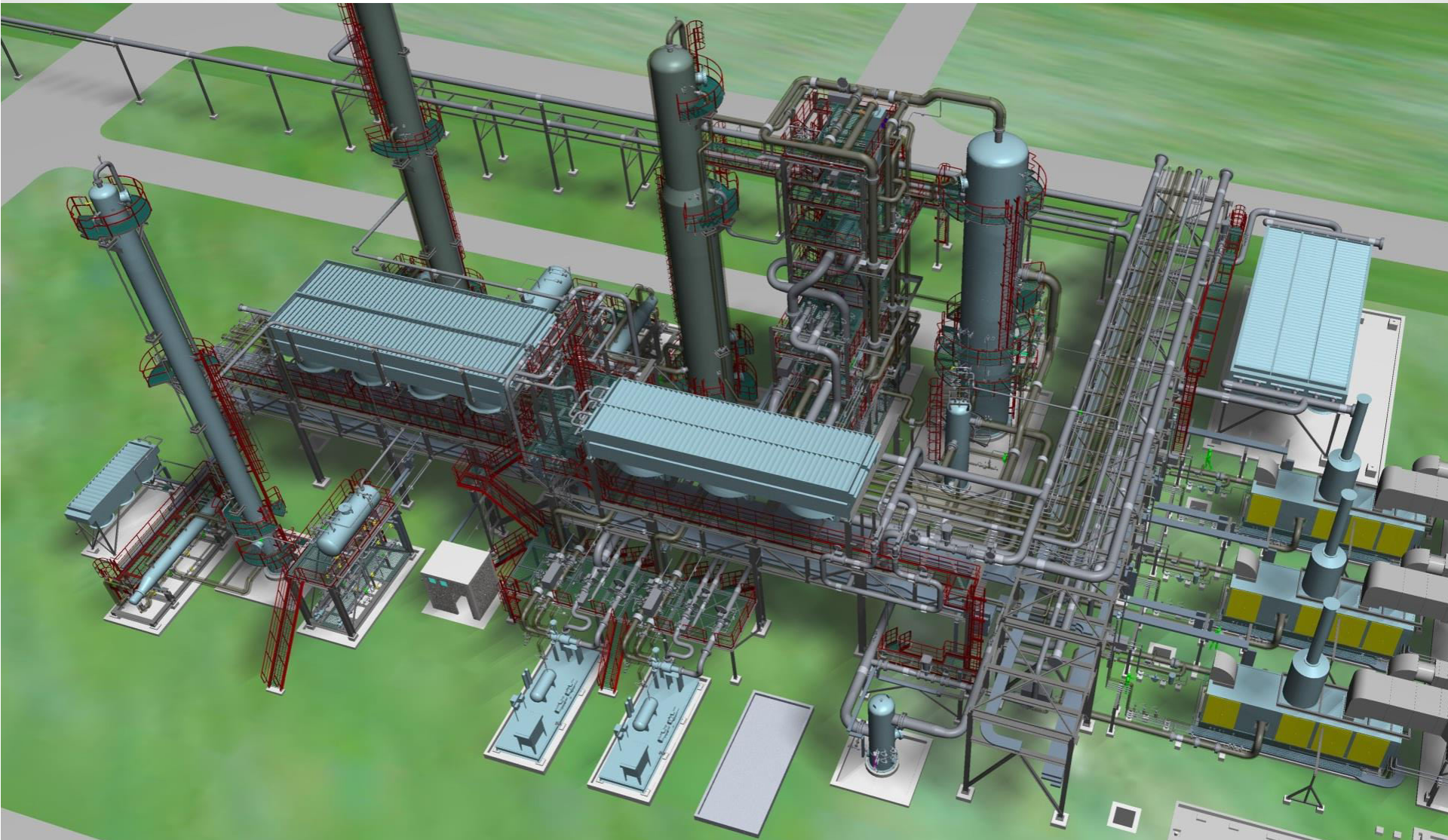


## Decarbonisation-Desulphuration Unit – Borankol Step III





## LPG Recovery and Fractionation Unit – Borankol Step III





## Decarbonisation-Desulphuration Unit – Borankol Step III





## LPG Recovery and Fractionation Unit – Borankol Step III





## Gas Treatment Plant – Borankol (Overall View)



## **What achieved Confind for all those complex treatment plants?:**

- Works Management;
- Fabrication/Manufacturing works for various equipments such as:
  - ✓ Slug-catcher units;
  - ✓ Launching-receiving scrapper traps;
  - ✓ Air coolers / condensers;
  - ✓ Pressure vessels (bi-phase, three-phase separators, adsorbers, towers etc.)
  - ✓ Heat exchangers;
  - ✓ Tanks;
  - ✓ Re-boilers;
  - ✓ Flare-stack
  - ✓ Incinerator
  - ✓ Skids for various applications;
  - ✓ Metallic structures;
  - ✓ Various buildings;



- Procurement in the market (Romania, EU, USA a.s.o) of:
  - ✓ Pumps;
  - ✓ Compressors;
  - ✓ Firefighting (PSI) equipments;
  - ✓ Valves;
  - ✓ Electric equipments (panels, electric cables, cable trays etc).
  - ✓ Field instrumentation and for control rooms
  - ✓ Flow metering for gas and fluid;
  - ✓ Materials for piping (pipes, fittings);
- Packaging and loading of TIR trucks and rail wagons from Campina and Floresti (CONFIND facilities) for being dispatched on site:
  - ✓ Around 9000 tons equipments and materials;
  - ✓ 500 trucks;
  - ✓ 80 rail wagons.

- Assign CONFIND personnel (mechanics, welders, electricians, automation, foremen, site engineers, site managers} – an average of 600 persons during a period of 4.5 years;
- Site erection of equipments, buildings, metallic structures, piping, electric, instrumentation, control rooms;
- Pre-commissioning;
- Commissioning works;
- Personnel training.

Designer: SC PETROSTAR SA Ploiesti;

Specialized Designer: TGE Engineering GmbH Germany for the III<sup>rd</sup> Step.

Our main collaborators:

- ✓SYSCOM Bucharest;
- ✓STERLING FLUID SYSTEMS GmbH;
- ✓Others.

The works carried out by Confind amounted at about 60 mil. EURO (Steps I, II and III).