

ORGANIZATION OF DIRECT REDUCED IRON (DRI) PRODUCTION



Project Objective



➤ Annual production volume

650
thousand tons
of product

➤ Reduction of dependence
on ferrous scrap

➤ Construction of a power plant
operating on waste gases

68
MW



Implementation Period:
2025 – 2027



Preliminary Project Cost : 180 million USD

- DRI Plant — 111 million USD
- Power Plant — 69 million USD
- Investor — 100 million USD
- FRRD — 70 million USD
- UMK — 10 million USD



Responsible Person:

Director of the Strategic Development
Department
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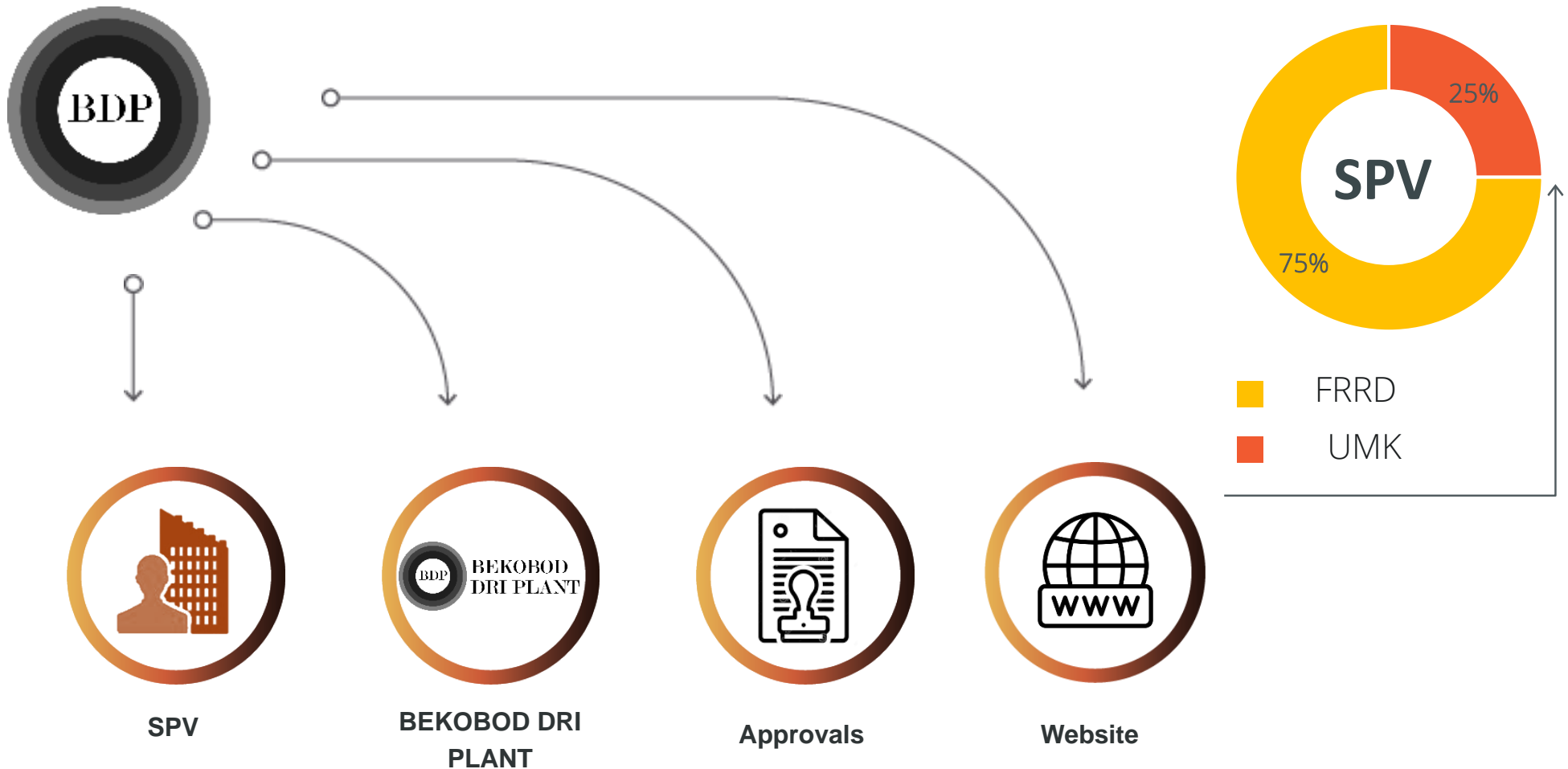
3 production lines with capacity:

1,950 tons per day or
600 thousand tons per year.



Implementation in
24 months
(from the date of advance
payment)

PROJECT STATUS AND COMPLETED WORK



A decision has been made to establish a joint venture with the participation of JSC "Uzmetkombinat" and the Fund for Reconstruction and Development.

BEKOBOD DRI PLANT

A Limited Liability Company "BEKOBOD DRI PLANT" has been established.

Approvals

Requests have been submitted to the relevant authorities for the establishment of a new organization, and the corresponding approval has been obtained.

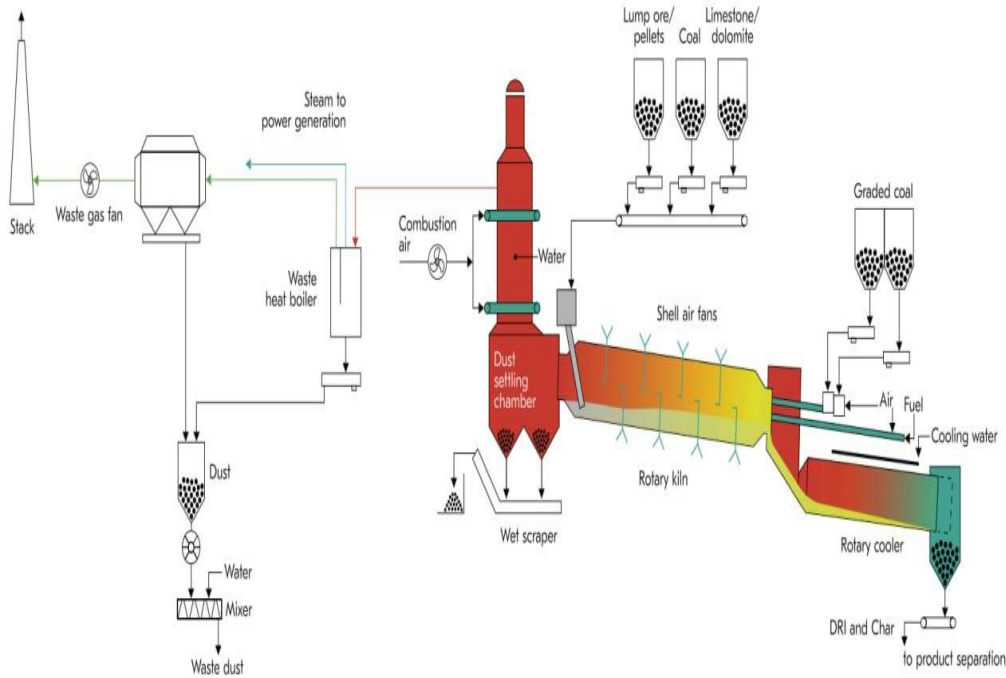
Website

The website www.bekoboddri.uz has been created and the necessary information has been published.



GENERAL PROCESS FLOW DIAGRAM OF DRI PRODUCTION

General technological process flow diagram



Kiln performance indicators

Iron ore pellets consumption (concentrate fraction 5–20 mm)	t/t	1.5
Coal consumption (fraction 0–20 mm)	t/t	0.85
Dolomite consumption (fraction 2–6 mm)	t/t	0.04
Electricity consumption	kWh/t	45.0
Water	m ³ /t	4.0
Fuel and lubricants consumption	l/t	2.0
Annual operating time fund	hours/year	7,920

Finished product quality indicators

Total Fe	%	90-91
Metallic Fe	%	80-81
Metallization degree	%	89-90
Carbon	%	0.15
Sulfur	%	0.03
Phosphorus	%	0.03

RAW MATERIAL REQUIREMENTS

IRON ORE PELLETS

Annual requirement of iron ore pellets:
1.0 million tons

Required Concentrate Characteristics

- Total Fe (iron) — min. 65.0%
- Phosphorus (P) — 0.03%
- SiO₂ — max. 3.5%
- Moisture — max. 2%
- Abrasion index — max. 5
- Size fraction — 8 to 16 mm
- MPS — max. 15 mm



COAL

Annual coal requirement:
585.0 thousand tons

Required Coal Characteristics

- Total moisture — max. 8%
- Volatile matter — max. 30.0%
- Ash content — max. 40.0%
- Minimum fixed carbon — 35.0%
- Sulfur (S) — max. 1.0%
- Hardgrove Grindability Index (HGI) — not more than 50
- Size fraction — 0 to 20 mm
- Ash fusion temperature (AFT) — 1200°C



DOLOMITE

Annual dolomite requirement:
26.0 thousand tons.

Required Dolomite Characteristics:

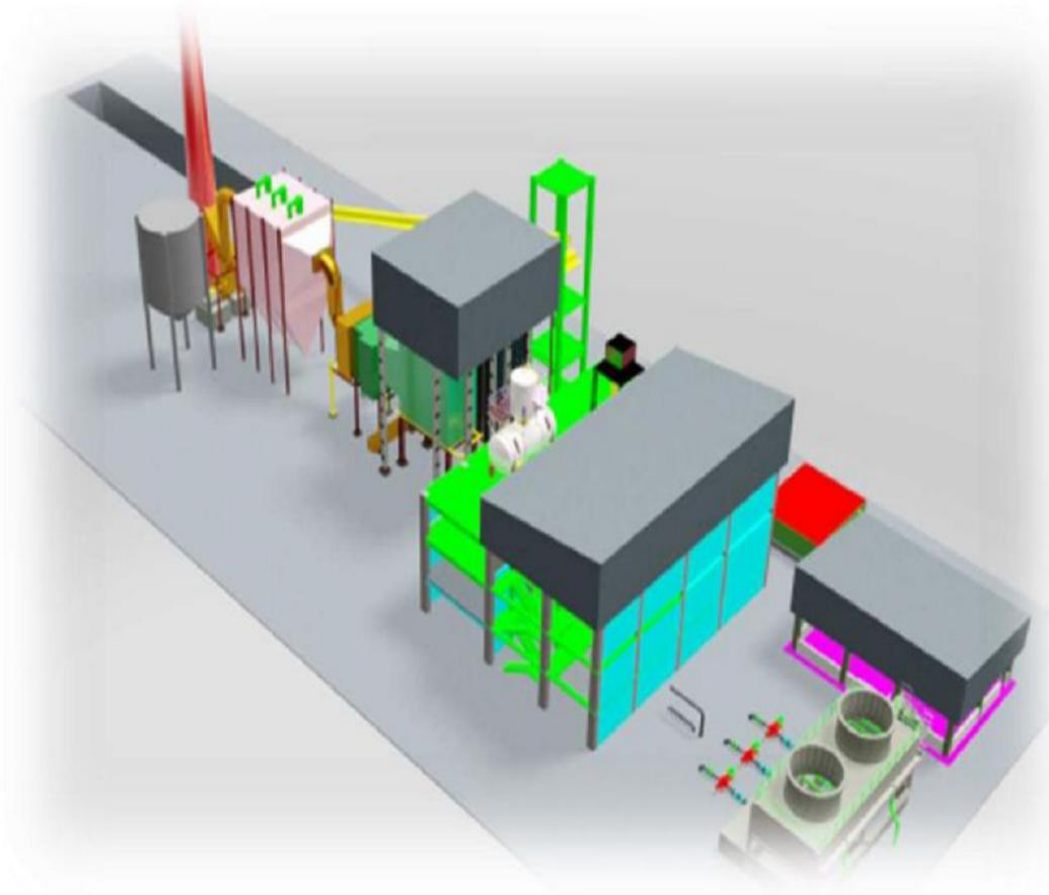
- Total moisture — max. 2%.
- LOI=38 - 42 %
- CaO — min. 26.0%.
- MgO = 17,00 % min.
- SiO₂=8,00% max.
- Size fraction — 2 to 6 mm



30 MW POWER PLANT USING A WASTE HEAT BOILER

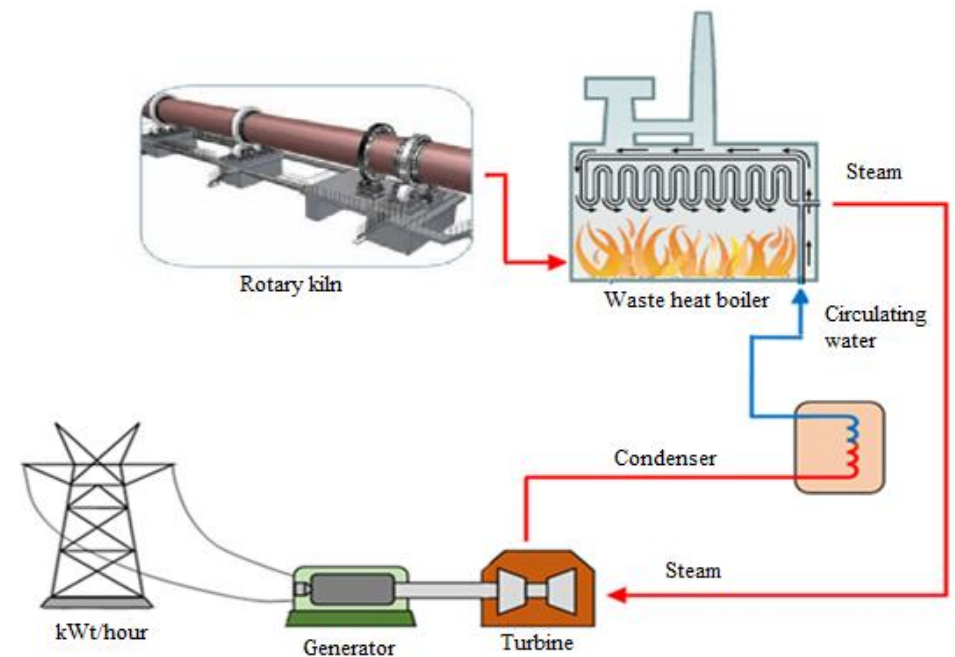
The power plant consists of:

- A selected 68 MW condensing steam turbine
- With a water-cooled condenser
- Annual electricity generation will amount to 538.5 million kWh



General View of the Power Plant

Basic Power Plant Diagram



PROJECT STATUS AND COMPLETED WORK



Development of the Project Feasibility Study (FS)

- Government approval has been obtained for the development of the Feasibility Study (FS) with Worley Parsons.
- The technical assignment (Terms of Reference) for the FS development has been prepared.
- On May 13, 2025, a contract was signed with LLC "WORLEYPARSONS UZBEKISTAN ENGINEERING."
- The project evaluation report has been received. The documents have been accepted by the plant.
- Worley Parsons has requested the development of a basic engineering design for the final Feasibility Study.



Cost of Worley Parsons Services:
USD 624,525 (excluding VAT)

Stage 1: USD 124,525.

Project cost formation
(Scoping Study)

Stage 2.1: USD 474,350

Feasibility Study development
(Feasibility Study)

Stage 2.2: USD 25,650

EIA development (Environmental Impact Assessment)

WORK ON DETERMINING THE PROJECT CONSTRUCTION SITE



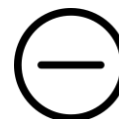
Pre-design work is being carried out by suppliers for equipment layout on two selected sites.



On the territory of JSC "Uzmetkombinat"
Total area: **14.0** hectares



- Located within the plant territory
- Availability of infrastructure



- Presence of high-voltage power lines

PROJECT ECONOMIC INDICATORS



Main economic indicators of the project:



Production cost of DRI
(from 63% concentrate)

318 USD / ton



Annual net revenue

206,7 million USD



EBITDA

26,3 million USD



Project net profit

22,3 million USD



Project IRR

21 %



Discounted payback period

6 years

