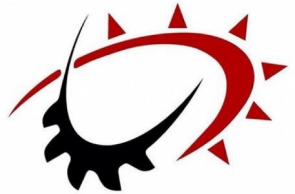




COMPLEXUL ENERGETIC OLTENIA



Energia pământului românesc

COMPLEXUL ENERGETIC OLTENIA TODAY AND TOMORROW



September 2022

Overview of Complexul Energetic Oltenia (CE Oltenia)

LIGNITE PRODUCTION

- 9 mining pits in Gorj & Mehedinți

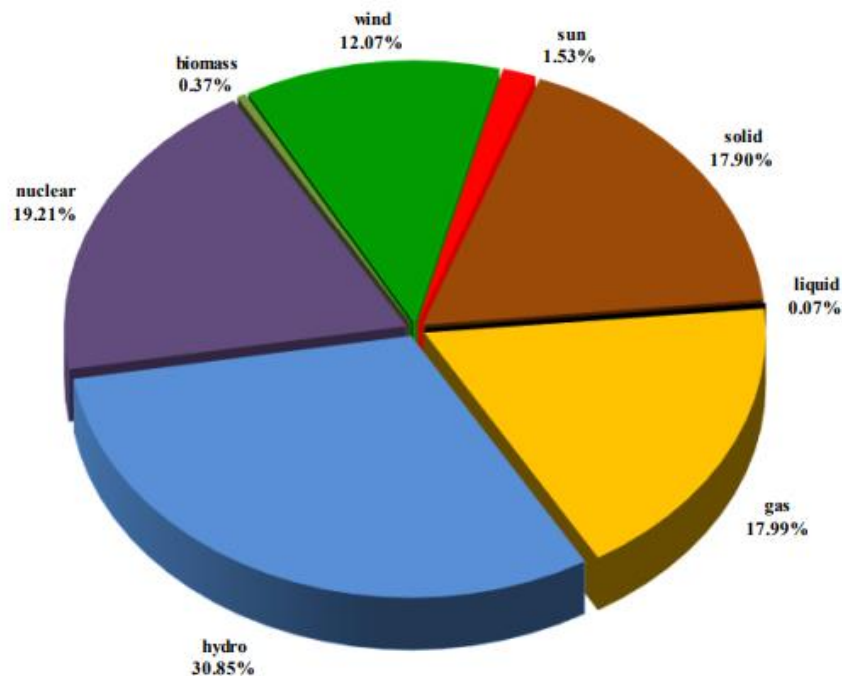
ELECTRICITY PRODUCTION

- **Total installed capacity 2925 MW**
 - TPP Rovinari: 1,320 MW (4 x 330 MW)
 - TPP Turceni: 990 MW (3 x 330 MW)
 - TPP Ișalnița: 315 MW (1 x 315 MW)
 - TPP Craiova: 300 MW (2 x 150 MW cogeneration)
- **All plants are authorised in terms of environmental protection**

THERMAL ENERGY PRODUCTION

- It offers thermal energy to the city of Craiova for ~200,000 inhabitants
- Average annual production 700,000 Gcal

Electricity structure by primary sources
(delivered by producers with dispatchable units)
- YEAR 2021-



The projected market share for coal-fired electricity production under the Integrated National Energy and Climate Change Plan (INECP) varies from 17.5 TWh in 2020 (25% market share) to 11.9 TWh in 2030 (15% market share) → an estimated **18-20%** market share of **CE Oltenia** over this period.

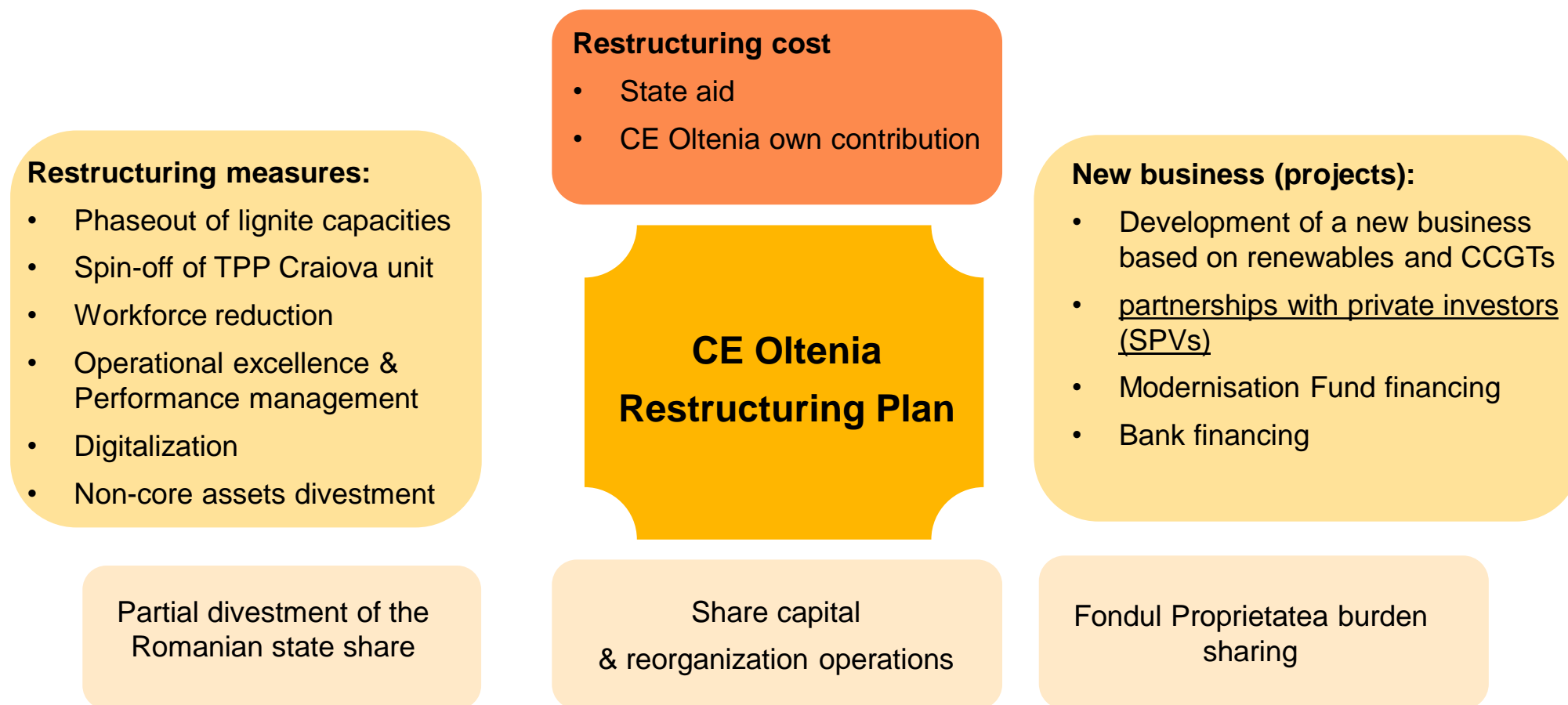
➤ Main shareholders:

- The Romanian State represented by the Ministry of Economy, Energy and Business Environment - 77%
- Fondul Proprietatea S.A. – 22%

KEY INDICATORS	2017	2018	2019	2020	2021
Electricity sales [ths. EUR]	559,534	538,835	577,595	363,096	581,522
Gross profit [ths. EUR]	61,681	-251,216	-180,298	-192,921	-316,534
Number of employees	13,704	13,109	12,858	12,193	11,307
Electricity production [TWh]	14.93	14.14	12.4	8.16	9.799
Coal consumption [M tonnes]	21.8	21.5	19.3	13.2	15,96

State aid and Restructuring Plan of CE Oltenia – a team work result

- ✓ December 2020: Romania notified European Commission for the State Aid for Restructuring in favor of CE Oltenia
- ✓ February 2021: EC/DG Competition opened an investigation
- ✓ January 26th 2022: The State aid and Restructuring Plan 2021-2026 was approved by European Commission by Decision C(2022) 553 final
- ✓ **The approval decision it was the result of a collaboration process between Romanian public authorities (Ministry of Energy, Competition Council and Permanent Representation of Romania to the European Union), ANRE, Transelectrica, OPCOM, CE Oltenia, Consultant and energy associations.**



Restructuring cost, State aid, CE Oltenia own contribution and Modernisation Fund

- According with EC Decision C(2022) 553 final /26.01.2022 the restructuring cost amount approved is for 3.94 bln EUR out of which the State aid 2.67 bln EUR (0.9 bln EUR Modernisation Fund) and CE Oltenia own contribution 1.27 bln EUR.
- In 23.05.2022, by EC Decision C(2022) 3496 final, it was approved the financing of new investment plan (735 MW eight PVs projects with 70% and 1325 MW two CCGTs projects with 50%) from Modernisation Fund for an amount of 0.9 bln EUR.

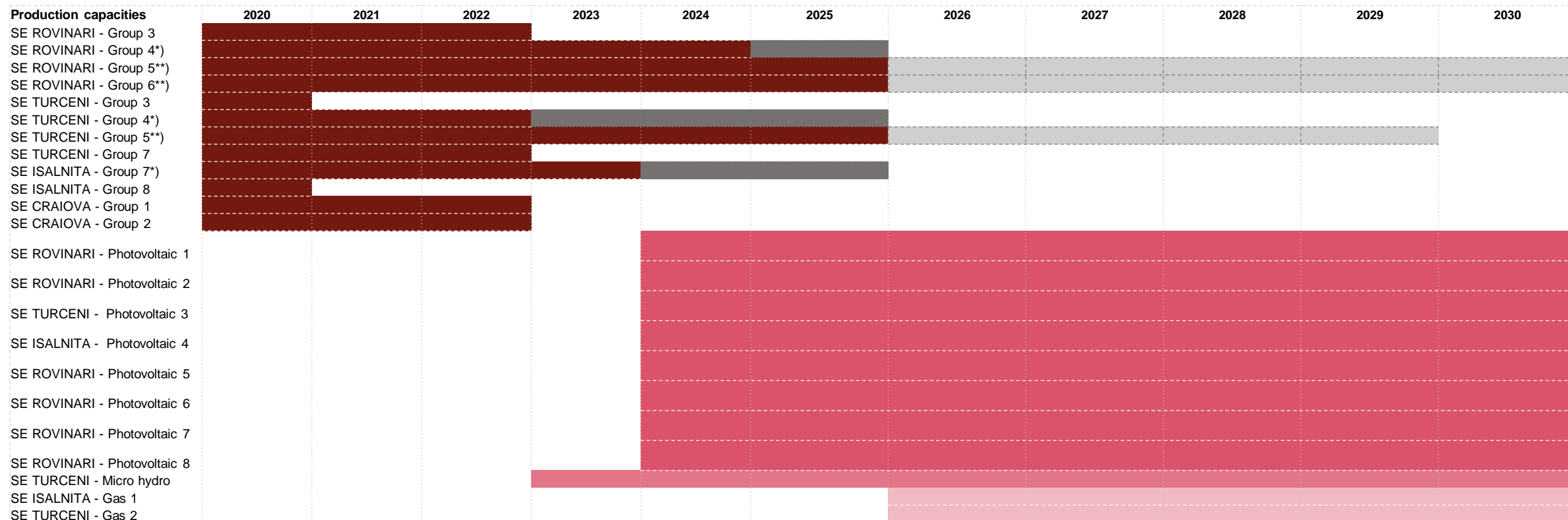
Restructuring costs	Mil EUR
1. Technical and technological measures	1,780
1.1. Investment plan SPVs	1522
1.2. Mine closure	48
1.3. Investment in current assets	210
2. Organisational/ managerial measures	67
2.1. Personnel restructuring	51
2.2. Other organizational measures	16
3. Environmental measures	1,771
4. Financial measures	319
4.1. Liquidity needs	259
4.2. Rest of financial measures	60
Total restructuring costs	3,937

State aid instruments	Mil EUR
Loan with state guarantee	196
Grants	1,090
Rescue aid loan	251
Modernisation Fund	896
Capital increase	226
Total	2,659

Sources of own contribution	Mil EUR
Cashed in sales	574
Bank loans	confidential
Private investors - SPVs	confidential
CE Oltenia in kind contribution	confidential
Total	1,278

Restructuring Plan → Closing lignite capacities and new investments calendar

The revised timeline for the commissioning of the new capacities, respectively for the closing/ conservation of the existing ones



❑ In the period 2023-2025 Units 4 Rovinari, 4 Turceni and 7 Isalnita will be in technical reserve

❑ In the period 2026-2030 the Units 5 Rovinari, 6 Rovinari and 5 Turceni will be in capacity reserve.

The operation of these blocks will be dictated by:

- reasons for energy security of supply and a approved clearing mechanism; or
- market conditions.

Between 2022 to 2030 the total installed capacity of CE Oltenia will remain almost at the same level ~3,000 MW but with a different energy sources structure.

The Restructuring Plan → a controlled transition from lignite to gas and PVs which will ensure the security of supply and a mix of energy sources in order to mitigate the energy market crunches

Restructuring period 2021 - 2026

- The State aid supports the existing activities as well as the development of the New Projects/Business
- The business plan targets a neutral cash flow position during the period

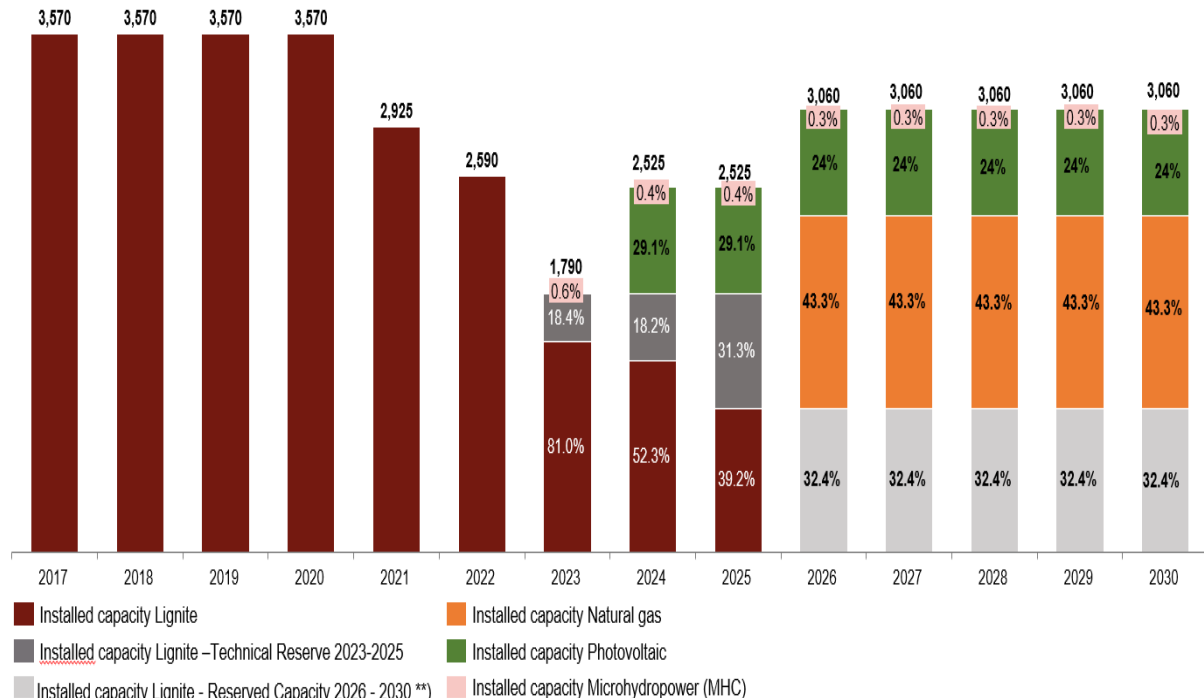
Lignite subsidiary 2026-2030

- Will incorporate the lignite assets which will be operated under a Capacity Reserve logic (either at TSO request or only if it can support itself under given market conditions)

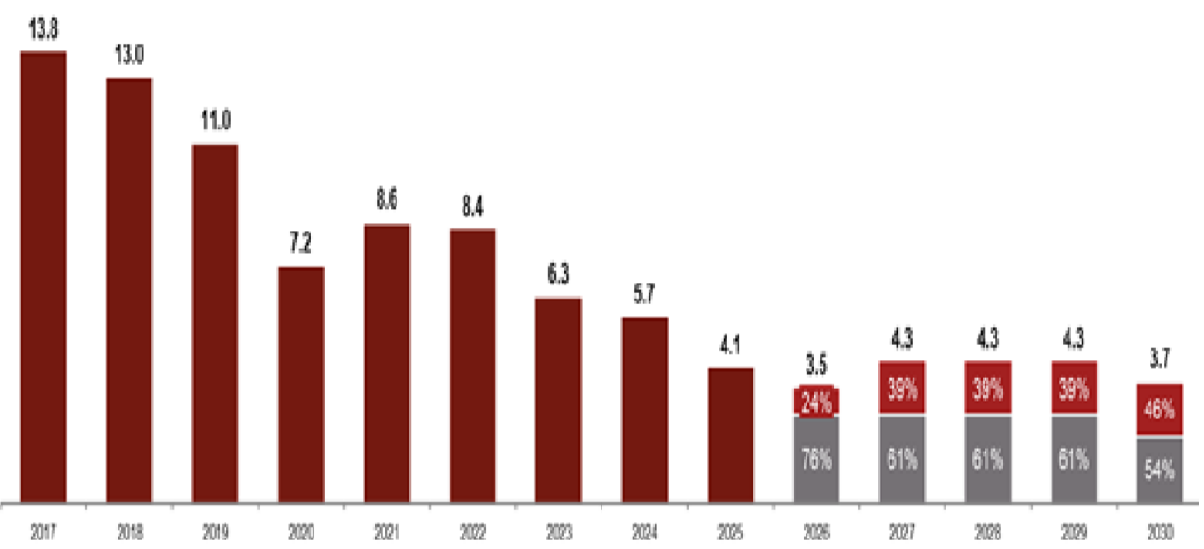
New Business 2027-2030

- will incorporate the new assets where each project will be placed in a different legal entity (SPV)
- **projected profitability and cash flow generation of the New Business will support the restoration of CE Oltenia's viability mainly by CCGTs projects**

Installed capacity [MW] by type of sources until 2030



CO2 emissions reduction: from 14 million tons/year 2017 to ~4 million tons after 2026



The investment plan for the diversification of the energy mix consists in commissioning of new production capacities by introducing solar energy and natural gas



New projects – Natural gas

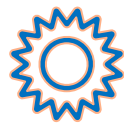
1325 MW

1 The development of a 475 MW natural gas power unit at TPP Turceni

- *replaces the existing lignite capacity*
- *contributes with >5% of the INECP objective for CO2 emissions reduction*
- *contributes with 14% of the INECP objective for gas-fired, flexible capacities to be installed*

2 The development of an 850 MW natural gas power unit at TPP Isalnita

- *replaces the existing capacity on lignite*
- *contributes with 10% of the INECP objective for CO2 emissions reduction*
- *contributes with 25% of the INECP objective for gas-fired, flexible capacities to be installed*



New projects – Solar energy

735 MW

The development of 8 photovoltaic parks:

- ~75 MW on the closed slag and ash deposits of TPP Rovinari
- ~100 MW on the closed slag and ash deposits of TPP Turceni
- ~85 MW on the closed slag and ash deposits of TPP Isalnita
- ~118 MW on Tismana 2 inner heap – E.M.C. Rosia – Rovinari
- ~115 MW on the inner heap Tismana 1 of TPP Rovinari
- ~60 MW on the outer heap Pinoasa of TPP Rovinari
- ~17 MW on the outer heap Bohorel TPP Rovinari
- ~110 MW on the inner heap Rovinari Est of TPP Rovinari



Hydro rehab.

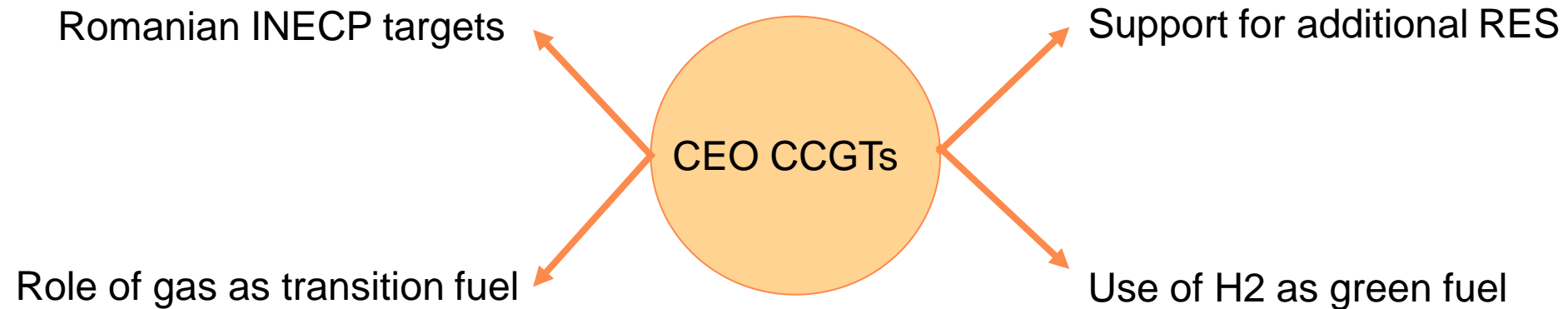
10 MW

The rehabilitation and modernisation of 1 micro hydropower plant with an installed capacity of 9.9 MW at TPP Turceni

All the newly proposed projects are mature and benefit from:

- The feasibility study that confirms the project validity and technical specifications
- Modernisation fund financing approved
- Bank syndication process on going in the technical, environmental and legal DD phases
- Owners engineers contract already signed for PVs and during the contracting phase analysis for CCGTs
- Permitting process on going, included ATRs

CEO CCGTs → CE Oltenia a future active player on natural gas regional market



After 2026 the CCGTs power plants will consume ~ 13.4 bln cubic meters of natural gas, around 10% of actual national gas consumption, which will make of CE Oltenia one of the biggest Romanian natural gas consumer.

CCGT Isalnita benefits

- ❑ Total reductions in CO2 emissions: ~ 3.045 kt CO2 / year (~ 10% of the objective of the Integrated National Energy and Climate Plan)
- ❑ Primary energy saved: ~ 642,500 Toe / year (~ 2.5% of the objective of the Integrated National Energy and Climate Plan)
- ❑ Trigger/support for an additional RES installed capacity around : ~ 330 MW for wind or ~566 MW for PV
- ❑ Hydrogen readiness
- ❑ Direct jobs created: 80 jobs
- ❑ Jobs during construction: 300-400 / year, with a peak of about 1000 people during the five years of project execution
- ❑ **Natural gas estimated yearly consumption 8.4 bln cubic meters**

CCGT Turceni benefits

- ❑ Total reductions in CO2 emissions: ~1,672 kt CO2/year (~5.4 % of the objective of the Integrated National Energy and Climate Plan)
- ❑ Primary energy saved: ~ 337,716 Toe/year (~ 1.3 % of the objective of the Integrated National Energy and Climate Plan)
- ❑ Trigger/support for an additional RES installed capacity around: ~ 369 MW for wind or ~633 MW for PV
- ❑ Hydrogen readiness
- ❑ Direct jobs created: 80 jobs
- ❑ Jobs during construction: 300-400 / year, with a peak of about 1000 people during the five years of project execution
- ❑ **Natural gas estimated yearly consumption 5 bln cubic meters**

