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**Romania**

**MINISTRY OF ECONOMY, ENERGY AND BUSINESS ENVIRONMENT**

**THE DIRECTIVE 2003/87/EC - ARTICLE 10C (1)**

**REPORT ON INVESTMENTS MADE IN UPGRADING ENERGY INFRASTRUCTURE AND CLEAN  
TECHNOLOGIES FOR 2020**



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## 1. INTRODUCTION

During 2020 has taken important steps in implementing the derogation provided by Article 10c.

Thus:

- There have been monitored the Investments for which financing contracts have been concluded (*Rehabilitation and modernization of 330 MW power unit no. 4 on lignite – SE Rovinari, Rehabilitation and modernization of power unit no. 7 on lignite – SE Isalnita, and New combined cycle with gas turbine – Iernut and New combined cycle with gas turbine – CECC Brazi*)
- The payments for the following reimbursement requests have been made:
  - The Reimbursing Request no. 4 under the Financing Contract no. 1/29.08.2016 concluded with the beneficiary Complexul Energetic Oltenia for the investment *Rehabilitation and modernization of power unit no. 7 on lignite – SE Isalnița;*
  - The Reimbursing Request no. 4 under the Financing Contract no. 2/29.08.2016 concluded with the beneficiary Complexul Energetic Oltenia for the investment *Rehabilitation and modernization of 330 MW power unit no. 4 on lignite – SE Rovinari;*
  - The reimbursement request no. 3 under the Financing Contract no. 3/14.09.2016 concluded with the beneficiary OMV Petrom S.A. for the investment *New combined cycle with gas turbine – CECC Brazi;*
  - The reimbursement request no. 2 under the Financing Contract no. 4/07.12.2017 concluded with the beneficiary SNGN Romgaz S.A. for the investment *New combined cycle with gas turbine – Iernut;*
- The investment works were continued at the *New combined cycle with gas turbine – Iernut* and at the investment *Rehabilitation and modernization of the unit no. 7, on lignite - SE Isalnita;*

## 2. LEGAL AND INSTITUTIONAL FRAMEWORK

The Romanian Government Report on investments made in upgrading energy infrastructure and clean technologies for 2020 pursuant to article 10c (1) of the Directive 2003/87/EC has been prepared in accordance with the provisions of the following legal acts and documents:

- ✓ Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community, and the derogation for free allocation of greenhouse gas emissions allowances for the modernization of the electricity production sector;



- ✓ Article 6.3. of the Communication from the Commission “Guidance document on the optional application of Article 10c of Directive 2003/87/EC (2011/C 99/03);
- ✓ Romania’s Application for free allocation of allowances to the power sector for the period 2013 – 2020, pursuant to article 10c of Directive 2003/87/EC;
- ✓ **Governmental Emergency Ordinance no. 30/2015** regarding some measures for implementing of the mechanism to transitionally allocate greenhouse gas emission allowances free of charge to electricity producers for the period 2013-2020, including the National Investments Plan thereof (*Governmental Emergency Ordinance no. 30/2015*);
- ✓ **Governmental Decision no. 1096/2013** for the approval of the mechanism to transitionally allocate greenhouse gas emission allowances free of charge to electricity producers for the period 2013-2020, including the National Investments Plan thereof, as amended (*Governmental Decision (GD) no 1096/2013*);
- ✓ **Ministerial Order no. 1277/2015** for the approval of the Procedures on the management of the counter value of the greenhouse gas emissions allowances transitionally allocated free of charge, for financing the investments in the National Investment Plan, monitoring, verification and reporting on investments, and eligible expenses (*The Procedures*).

The report is based on individual supporting documents submitted by the operators included in the National Investment Plan, as included in Romania’s Application for free allocation of allowances to the power sector for the period 2013 – 2020, pursuant to article 10c of Directive 2003/87/EC, amended.

### 3. STATUS OF THE IMPLEMENTATION OF THE DEROGATION PROVIDED BY ART. 10C (1)

#### 3.1. Payment of the yearly allocations 2013 - 2020 – NIP FUND

The Application submitted by Romania based on art. 10c (6) of Directive 2003/87/EC of the European Parliament and of the Council to obtain the derogation for free allocation of greenhouse gas emissions allowances for the modernization of the electricity production sector, was approved through Commission Decision C(2012) 4564 final of 06.07.2012 and Commission Decision C(2012) 8776 final of 05.12.2012 on the state aid SA.34753 (2012/N).

As important step towards implementation, Governmental Decision (GD) no 1096/2013 has been issued approving the mechanism to transitionally free allocate greenhouse gas emission allowances to electricity producers for the period 2013-2020, including the National Investments Plan. This Governmental Decision represents the legal framework on the basis of which the derogation under art. 10c of the Directive 2003/87/CE is implemented in Romania.

The Ministry of Economy, Energy and Business Environment, successor to the Ministry of Energy, is the authority in charge with the implementation of Article 10c of the Directive ETS in



Romania, including the activity regarding monitoring and implementation of the investments in the National Investment Plan.

In order to set up the institutional circuits for NIP implementation, several additional acts have been issued and approved, as follows:

- a) Government Decision no. 151, published on March 2015 (amending GD 1096/2013), is presenting clarifications regarding the NIP implementation mechanism.
- b) Government Emergency Ordinance no. 30/2015 (primary legal framework), published on June 2015, is setting up and approve a dedicated necessary budget for activities related to the monitoring and implementation of NIP approved projects.
- c) Government Decision no. 770/2015, published on September 2015, amending Government decision no. 1096/2013, as a secondary legislative framework adopted to ensure the implementation of Government Emergency Ordinance no. 30/2015.
- d) Government Decision no. 550/2016, published in August 2016, is approving the Framework Financing Contracts as per types of investments:
  - (i) Approving the Framework Financing Contract for investments finalized when the Financing Contract is concluded;
  - (ii) Approving the Framework Financing Contract for investments under implementation when the Financing Contract is concluded;
  - (iii) Approving the Framework Financing Contract for new investments;
- e) Law no. 183/18.07.2017 for the approval of the Government Emergency Ordinance no. 30/2015;
- f) Government Decision no. 378/2020, published in May 2020, amending the Government Decision no. 1096/2013, which extended the deadline for completion and commissioning of investments financed from NIP, from 30.06.2020 to 31.12.2020;
- g) Government Decision no. 1070/2020, published in December 2020, amending the Government Decision no. 1096/2013, which extended the deadline for completion and commissioning of investments financed from NIP, from 31.12.2020 to 30.06.2021;

We mention that the Romanian authorities sent to DG – Climate Action through the letter no. 9565/02.10.2020 a request for 6 months extension, until 30.06.2021, of the term for completion and commissioning of the investments financed from NIP. Through the letter no. Ares (2020) 7058105-24/11/2020, DG Climate Action has sent the response regarding the positive assessment of the request for a 6-month extension of the deadline for completion of investments in the National Investment Plan pursuant to Article 10c of the revised Directive 2003/87/EC.

All these new successive legislative have been adopted to make possible the implementation of the National Investment Plan pursuant to Article 10c of the ETS Directive.

Also, at the ministry level, there have been approved the *Procedures on the management of the counter value of the greenhouse gas emissions allowances transitionally allocated free of charge, for financing the investments in the National Investment Plan, monitoring, verification*



and reporting on investments, and eligible expenses (hereinafter called "the NIP Procedures") by the Minister's Order no. 1277/30.10.2015, which have been published on the 12<sup>th</sup> of November 2015, in the Official Gazette.

Following the adoption of GD no. 378/2020 the NIP Procedures were amended by the Order of the Minister of Economy, Energy and Business Environment no. 1930/2020 and published in the Official Gazette no. 716/10.08.2020.

The total amount collected on the account of the National Investment Plan, based on payments made in relation to Article 10c (2013, 2014, 2015, 2016, 2017, 2018 and 2019), is RON 1.616.887.769,87 (359.308.393,3 euro at an exchange rate of 4.5 lei/euro).

Due to the fact that no free allocations were foreseen for 2020, no payments were made to the NIP account for greenhouse gas emission allowances this year.

### **3.2. THE IMPLEMENTATION OF THE NATIONAL INVESTMENT PLAN (NIP)**

#### **3.2.1. Submitted Financing Requests**

According to art. 17 para. (2) of *The Procedures*, related to the guidelines for financing requests, these could have been submitted by the beneficiaries of the NIP Fund starting with May 5th, 2014.

As concerns the Financing Requests submitted by NIP beneficiaries, so far, there have been received 7 (seven) Financing Requests, out of which:

- 4 (four) Financing Requests were approved for the following investments:
  1. **Rehabilitation and modernization of 330 MW power unit no. 4 on lignite – SE Rovinari with Societatea Complexul Energetic Oltenia SA as beneficiary;**
  2. **New combined cycle with gas turbine – CCCC Brazi, with Societatea OMV Petrom SA as beneficiary ;**
  3. **Rehabilitation and modernization of power unit no 7 on lignite – SE Isalnita, with Societatea Complexul Energetic Oltenia S.A. as beneficiary;**
  4. **New combined cycle with gas turbine (CCGT) - Iernut, with Societatea Nationala de Gaze Naturale Romgaz S.A. as beneficiary.**
- 3 (three) Financing Requests, submitted by the NIP beneficiaries that have not been approved, referred to the following investments:
  1. **RO-Ş-029 – New cogeneration with gas turbine and heat recovery boiler with CET Arad SA as beneficiary**



The Financing Request submitted three times was not complete according to the requirements provided in the NIP Procedures, such as, inter alia, not including the documents proving the financing capacity of the beneficiary to realize the investment and the Environmental Permit for the investment.

**2. RO-Ş-12 – Waste to energy with International Recycling Energy SA as beneficiary**

The submitted Financing Request was not complete according to the requirements provided in the NIP Procedures, such as, inter alia, not including the documents proving the financing capacity of the beneficiary to realize this investment and the Environmental Permit for the investment.

**3. RO-Ş-026 – Rehabilitation and modernization of 330 MW power unit no 5 on lignite – SE Rovinari with Complexul Energetic Oltenia as beneficiary**

The submitted Financing Request was not complete according to the requirements provided in the NIP Procedures, such as, inter alia, not including the documents proving the financing capacity of the beneficiary to realize this investment.

The details regarding the investment's values and eligible costs included in the submitted and approved Financing Requests are presented in Table no. 1.

### **3.2.2. Concluded Financing Contracts**

Based on the approved Financing Requests, above mentioned, 4 (four) Financing Contracts have been concluded, as presented in the Table no. 2.



Table no. 1 - Details regarding the costs included in the approved Financing Requests

| ID of the installation as per the Application | Installation ID (Union Registry) | No.      | Investment   | Total investment value (VAT included) |                | Eligible cost included in Financing Request (VAT excluded) |                | The percentage of eligible costs to be financed from NIP fund |
|---|----------------------------------|----------|--|---------------------------------------|----------------|--|----------------|---|
|   |                                  |          |  | Lei                                   | Eur            | Lei  | Eur            |   |
| RO-009  | RO-87                            | RO-Ş-025 | Rehabilitation and modernization of 330 MW power unit no. 4 on lignite - SE Rovinari | 511,279,700.00                        | 113,617,711.12 | 369,164,860.00   | 82,036,635.56  | 25%, respectively 92,791,215 lei (approx. 20.5 mil euro)      |
| RO-033  | RO-292                           | RO-Ş-015 | New combined cycle with gas turbine - CCCC Brazi                                     | 2,757,034,185.67                      | 612,674,263.49 | 1,634,381,302.70   | 363,195,845.05 | 25%, respectively 408,595,325,69 lei (approx. 90.8 mil, Euro) |
| RO-007  | RO-86                            | RO-Ş-028 | Rehabilitation and modernization of power unit no 7 on lignite - SE Isalnita         | 171,284,500                           | 38,063,222.23  | 134,226,700.00   | 29,828,155.56  | 25%, respectively 33,556,675 lei (approx. 7.5 mil euro)       |
| RO-017  | RO-108                           | RO-Ş-027 | New combined cycle with gas turbine (CCGT) - Iernut                                  | 1,539,542,560                         | 342,120,568.89 | 1,284,581,900  | 285,462,644.44 | 25%, respectively 321,145,475 lei (approx. 71.4 mil. euro)    |

The exchange rate: 1 Euro = 4.5 Lei

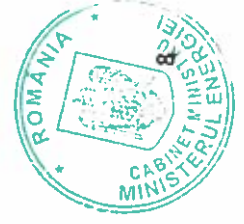




Table no. 2 - Details regarding the costs included in the concluded Financing Contracts

| ID of the installation as per the Application | Installation ID (Union Registry) | No.      | Investment   | Total investment value (VAT included) |                | Eligible cost included in Financing Contract (VAT excluded) |                | The percentage of eligible costs to be financed from NIP fund   |
|---|----------------------------------|----------|--|---------------------------------------|----------------|---|----------------|---|
|   |                                  |          |  | Lei                                   | Eur            | Lei   | Eur            |   |
| RO-009  | RO-87                            | RO-Ş-025 | Rehabilitation and modernization of 330 MW power unit no. 4 on lignite - SE Rovinari - Financing Contract no. 2/29.08.2016 | 381,549,625.21                        | 85,549,243.32  | 245,300,000.00  | 55,000,000.00  | 25%, respectively 61,325,000 lei equivalent of 13,750,000 euro at the exchange rate of 4.46 lei/euro        |
| RO-033  | RO-292                           | RO-Ş-015 | New combined cycle with gas turbine - CCCC Brazi - Financing Contract no. 3/14.09.2016                                     | 2,756,819,146.77                      | 618,120,884.93 | 1,633,700,192.31  | 366,300,491.55 | 25%, respectively 408,425,048.10 lei equivalent of 91,575,122.89 euro at the exchange rate of 4.46 Lei/euro |
| RO-007  | RO-86                            | RO-Ş-028 | Rehabilitation and modernization of power unit no 7 on lignite - SE Isalnita - Financing Contract no. 1/29.08.2016         | 171,284,500.00                        | 38,404,596.42  | 134,226,700.00  | 30,095,672.65  | 25%, respectively 33,556,675 lei equivalent of 7,523,918.16 euro at the exchange rate of 4.46 Lei/euro      |
| RO-017  | RO-108                           | RO-Ş-027 | New combined cycle with gas turbine (CCGT) - Iernut - Financing Contract no. 4/07.12.2017                                  | 1,526,794,527                         | 334,823,361    | 1,283,649,435   | 281,502,069    | 25%, respectively 320,912,359 equivalent of 70,375,517 euro at the exchange rate of 4.56 Lei/euro           |



During 2020, the following took place:

- For 3 financing contracts concluded, respectively for Rovinari (RO-Ş-025), Brazi (RO-Ş-015) and Isalnita (RO-Ş-028), the beneficiaries have submitted the reimbursement requests no. 5 and for the fourth financing contract concluded, respectively for the investment *New combined cycle with gas turbine - Iernut* (RO-Ş-027), the Reimbursing Request no. 4 was submitted.
- For the investment *Rehabilitation and modernization of power unit no. 7 on lignite - SE Işalnița* (RO-Ş-028) – Financing contract no. 1/2016, it has been approved the Reimbursement Request no. 4 and reimbursed the related amount of 1,1676.75 lei;
- For the investment *Rehabilitation and modernization of 330 MW power unit no 4 on lignite - SE Rovinari* (RO-Ş-025) - Financing contract no. 2/2016, have been approved the Reimbursement Request no. 4 and no. 5 and reimbursed the total amount related to Reimbursement Request no. 4 in the amount of 1,561,334.5 lei, and the amount related to the Reimbursement Request no. 5 in the amount of 1,561,334.5 lei is being paid;
- For the investment *New combined cycle with gas turbine CECC Brazi* (RO-Ş-015) ) – Financing contract no. 3/2016, it has been approved the Reimbursement Request no. 3 and reimbursed the related amount of 140,193,033.72 lei;
- For the investment *New combined cycle with gas turbine - Iernut* (RO-Ş-027) ) – Financing contract no. 4/2017, it has been approved the Reimbursement Request no. 2 and reimbursed the related amount of 115.027.026,77 lei;
- The investment works were continued at the *New combined cycle with gas turbine – Iernut* and at the investment *Rehabilitation and modernization of the unit no. 7, on lignite - SE Isalnita*.

The Reimbursement requests submitted are presented together with independent audit reports and include the data presented in Tables no. 3 to 6 below.

For the investment RO-Ş-025 - *Rehabilitation and modernization of 330 MW power unit no, 4 on lignite - SE Rovinari*, which is a finalized investment and for which the Beneficiary has presented the final audit report:

Table no. 3

| According to:               | Total Investment Value<br>VAT included | Eligible expenses | Non-reimbursable financing<br>from NIP Fund |
|-----------------------------|--|-------------------|---|
| Financing Contract<br>(Lei) | 381,549,625.21                         | 245,300,000       | 61,325,000                                  |
| (EUR)                       | 85,549,243.32                          | 55,000,000        | 13,750,000                                  |
| Audit report<br>(Lei)       | 381,549,625.21                         | 245,300,000       | 61,325,000                                  |



For the investment RO- $\text{\$}$ -015 - *New combined cycle with gas turbine - CCCC Brazi*, which is a finalized investment and for which the Beneficiary has presented the final audit report:

Table no. 4

| According to:               | Total Investment Value<br>VAT included | Eligible expenses | Non-reimbursable financing<br>from NIP Fund |
|-----------------------------|--|-------------------|---|
| Financing Contract<br>(Lei) | 2,756,819,146.77                       | 1,633,700,192.31  | 408,425,048.10                              |
| (EUR)                       | 618,120,884.93                         | 366,300,491.55    | 91,575,122.89                               |
| Audit report<br>(Lei)       | 2,756,484,347.00                       | 1,633,430,192.00  | 408,357,548.00                              |

For the investment RO- $\text{\$}$ -028 - *Rehabilitation and modernization of power unit no. 7 on lignite - SE Isalnita*, which is an investment under implementation and for which are presented the audit reports for the first five Reimbursing Requests:

Table no. 5

| According to:   | Total Investment Value<br>VAT included | Eligible expenses | Non-reimbursable financing<br>from NIP Fund |
|---|--|-------------------|---|
| Financing Contract<br>(Lei)                                       | 171,284,500.00                         | 134,226,700.00    | 33,556,675.00                               |
| (EUR)   | 38,404,596.42                          | 30,095,672.65     | 7,523,918.16                                |
| Audit reports for the first five<br>Reimbursing Requests<br>(Lei) | 80,783,594.56                          | 67,151,304.80     | 16,787,826.20                               |
| of which:   |  |                   |   |
| Audit report for the<br>Reimbursing Request no. 1 (Lei)           | 10,461,645.26                          | 10,252,235.40     | 2,563,058.85                                |
| Audit report for the<br>Reimbursing Request no. 2 (Lei)           | 53,057,991.85                          | 42,530,262.20     | 10,632,565.55                               |
| Audit report for the<br>Reimbursing Request no. 3 (Lei)           | 10,478,664.86                          | 8,665,443.20      | 2,166,360.80                                |
| Audit report for the<br>Reimbursing Request no. 4 (Lei)           | 54,733.17                              | 46,707.00         | 11,676.75                                   |
| Audit report for the<br>Reimbursing Request no. 5 (Lei)           | 6,730,559.42                           | 5,656,657.00      | 1,414,164.25                                |



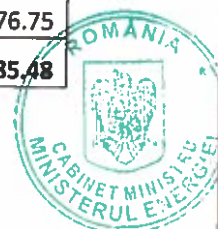
For the investment RO- $\text{\$}$ -027 - *New combined cycle with gas turbine (CCGT) - Iernut*, which is an investment under implementation and for which it is presented the audit reports for the first four Reimbursing Requests:

Table no. 6

| According to:  | Total Investment Value<br>VAT included | Eligible expenses       | Non-reimbursable financing from NIP Fund |
|--|--|-------------------------|--|
| Financing Contract   |  |                         |  |
| (Lei)  | 1,526,794,527                          | 1,283,649,435           | 320,912,359                              |
| (EUR)  | 334,823,361                            | 281,502,069             | 70,375,517                               |
| <b>Audit reports for the first four Reimbursing Requests (Lei) of which:</b> | <b>1,315,768,250.93</b>                | <b>1,106,075,431.67</b> | <b>276,518,857.93</b>                    |
| Audit report for the Reimbursing Request no. 1 (Lei)                         | 100,715,518.0                          | 83,976,896.53           | 20,994,224.14                            |
| Audit report for the Reimbursing Request no. 2 (Lei)                         | 547,450,291.95                         | 460,108,107.06          | 115,027,026.77                           |
| Audit report for the Reimbursing Request no. 3 (Lei)                         | 448,102,401.85                         | 376,592,945.66          | 94,148,236.42                            |
| Audit report for the Reimbursing Request no. 4 (Lei)                         | 219,500,039.13                         | 185,397,482.42          | 46,349,370.60                            |

So far from the total amount accumulated in the account of the National Investment Plan of 1.616.887.769,87 lei have been made payments amounting to 577,512,025.47 lei as follows:

| Financing Contract/<br>Reimbursing Request   | 2017 | 2018                | 2019                 | 2020             | Total                |
|--|------|---------------------|----------------------|------------------|----------------------|
| 0  | 1    | 2                   | 3                    | 4                | 5                    |
| <b>Financing Contract no. 1/29.08.2016 for the investment Rehabilitation and modernization of power unit no 7 on lignite - SE Isalnita</b> |      |                     |                      |                  |                      |
| Reimbursing Request no. 1  |      | 2,135,882.38        |                      |                  | 2,135,882.38         |
| Reimbursing Request no. 2  |      |                     | 10,632,565.55        |                  | 10,632,565.55        |
| Reimbursing Request no. 3  |      |                     | 2,166,360.80         |                  | 2,166,360.80         |
| Reimbursing Request no. 4  |      |                     |                      | 11,676.75        | 11,676.75            |
| <b>Total</b>   |      | <b>2,135,882.38</b> | <b>12,798,926.35</b> | <b>11,676.75</b> | <b>14,946,485.48</b> |



| 0  | 1                   | 2                    | 3                     | 4                     | 5                     |
|--|---------------------|----------------------|-----------------------|-----------------------|-----------------------|
| <b>Financing Contract no. 2/29.08.2016 for the investment Rehabilitation and modernization of 330 MW power unit no. 4 on lignite - SE Rovinari</b> |                     |                      |                       |                       |                       |
| Reimbursing Request no. 1  | 6,245,338.00        |                      |                       |                       | 6,245,338.00          |
| Reimbursing Request no. 2  |                     | 30,899,447.00        |                       |                       | 30,899,447.00         |
| Reimbursing Request no. 3  |                     |                      | 21,057,546.00         |                       | 21,057,546.00         |
| Reimbursing Request no. 4  |                     |                      |                       | 1,561,334.50          | 1,561,334.50          |
| <b>Total</b>   | <b>6,245,338.00</b> | <b>30,899,447.00</b> | <b>21,057,546.00</b>  | <b>1,561,334.50</b>   | <b>59,763,665.50</b>  |
| <b>Financing Contract no. 3/14.09.2016 for the investment New combined cycle with gas turbine - CECC Brazi</b>                                     |                     |                      |                       |                       |                       |
| Reimbursing Request no. 1  |                     |                      | 33,212,872.13         |                       | 33,212,872.13         |
| Reimbursing Request no. 2  |                     |                      | 193,374,717.73        |                       | 193,374,717.73        |
| Reimbursing Request no. 3  |                     |                      |                       | 140,193,033.72        | 140,193,033.72        |
| <b>Total</b>   |                     |                      | <b>226,587,589.86</b> | <b>140,193,033.72</b> | <b>366,780,623.58</b> |
| <b>Financing Contract no. 4/07.12.2017 for the investment New combined cycle with gas turbine - Iernut</b>   |                     |                      |                       |                       |                       |
| Reimbursing Request no. 1  |                     | 20,994,224.14        |                       |                       | 20,994,224.14         |
| Reimbursing Request no. 2  |                     |                      |                       | 115,027,026.77        | 115,027,026.77        |
| <b>Total</b>   |                     | <b>20,994,224.14</b> |                       | <b>115,027,026.77</b> | <b>136,021,250.91</b> |
| <b>Overall total</b>   | <b>6,245,338.00</b> | <b>54,029,553.52</b> | <b>260,444,062.21</b> | <b>256,793,071.74</b> | <b>577,512,025.47</b> |

Considering that the total value already committed to be reimbursed, based on the four financing contracts concluded, is in the amount of 824,219,082.10 lei, it results that at the end of the implementation of the National Investment Plan, in the NIP Account remains a surplus of funds of 792,668,687.77 lei related to the non-reimbursable financing amount.

### 3.2.3. Status of the investments included in the National Investment Plan

Table no. 7 details the status of the investments included in the National Investment Plan from the point of view of the provisions of art. 10c (1) of Directive 2003/87/EC, including the stage of development or cancelled at 31 December 2020. The status is based on the evidence documents received upon request from the beneficiaries of the investments from the National Investment Plan.



Table no. 7: Status of the investments included in the National Investment Plan

| No.      | Operator                | Company group  | Investment description  | Year of starting | Status of the investment |
|----------|-------------------------|----------------|---|------------------|--------------------------|
| RO-Ş-001 | SEB – CET Bucureşti Sud | ELCEN          | New cogeneration with combined cycle with gas turbine (CCGT)          | 2014             | Investment cancelled     |
| RO-Ş-002 | SEB – CET Grozavesti    | ELCEN          | New cogeneration with combined cycle with gas turbine (CCGT)          | 2014             | Investment cancelled     |
| RO-Ş-003 | Titan Ecopower          | Titan Ecopower | New cogeneration with gas engines units                               | 2014             | Investment cancelled     |
| RO-Ş-004 | SE Turceni              | SE Turceni     | Rehabilitation and modernisation of 330 MW power unit no 6 on lignite | 2015             | Investment cancelled     |
| RO-Ş-005 | SE Rovinari             | SE Rovinari    | New 500 MW power unit on local lignite, supercritical parameters      | 2013             | Investment cancelled     |
| RO-Ş-006 | SE Galati               | SE Galati      | New cogeneration with gas turbine and heat recovery boiler            | 2015             | Investment cancelled     |
| RO-Ş-007 | Power Plant Fagaras     | PP Fagaras     | New combined cycle  | 2013             | Investment cancelled     |
| RO-Ş-008 | ELCEN                   | ELCEN          | New peak units with gas turbines at Fantanele                         | 2015             | Investment cancelled     |
| RO-Ş-009 | GET Govora              | CJ Valcea      | New cogeneration on biomass   | 2013             | Investment cancelled     |



| No.      | Operator                 | Company group | Investment description  | Year of starting | Status of the investment  |
|----------|--------------------------|---------------|---|------------------|---|
| RO-Ş-010 | CTE Deva                 | SC Deva       | New combined cycle with gas turbine                                   | 2013             | Investment cancelled  |
| RO-Ş-011 | ADREM                    | ADREM         | New cogeneration with gas turbine and heat recovery boiler            | 2013             | Investment cancelled  |
| RO-Ş-012 | International Recycling  | CL Timisoara  | Waste to energy   | 2013             | Investment cancelled  |
| RO-Ş-013 | Energy Cogen - Fagaras   | Energy Cogen  | New cogeneration with gas turbine and heat recovery boiler            | 2013             | Investment cancelled  |
| RO-Ş-014 | Energy Cogen - Savinesti | Energy Cogen  | New cogeneration with gas turbine and heat recovery boiler            | 2013             | Investment cancelled  |
| RO-Ş-015 | CCCC Brazi               | PETROM        | New combined cycle with gas turbine                                   | 2009             | Investment finalized in August 2012;<br>Financing Contract concluded on September 14, 2016;<br>Five Reimbursing Requests submitted ;<br>It was finalized the analysis and reimbursed the first three Reimbursing Requests. The other two Reimbursing Requests are under analysis. |
| RO-Ş-016 | Braila Power             | Braila Power  | New 800 MW power unit on imported hard coal, supercritical parameters | 2014             | Investment cancelled  |
| RO-Ş-017 | Ecogen                   | Ecogen        | New cogeneration with thermal engines                                 | 2013             | Investment cancelled  |



| No.      | Operator         | Company group | Investment description  | Year of starting | Status of the investment |
|----------|------------------|---------------|---|------------------|--------------------------|
| RO-Ş-018 | Amonil           | Amonil        | New cogeneration with gas turbine and heat recovery boiler                | 2014             | Investment cancelled     |
| RO-Ş-019 | SC CET SA Braila | CL Braila     | New cogeneration with gas turbine and heat recovery boiler (simple cycle) | 2013             | Investment cancelled     |
| RO-Ş-020 | SE Isalnita      | SE Calova     | New power unit on local lignite, ultra-supercritical parameters           | 2015             | Investment cancelled     |
| RO-Ş-021 | SE Calova II     | SE Calova     | New cogeneration with combined cycle with gas turbine (CCGT)              | 2016             | Investment cancelled     |
| RO-Ş-022 | SC Paroseni      | SC Paroseni   | New 200 MW power unit on local hard coal, supercritical parameters        | 2014             | Investment cancelled     |
| RO-Ş-023 | Vilcet           | Vilcet        | New cogeneration with gas turbine and heat recovery boiler                | 2013             | Investment cancelled     |
| RO-Ş-024 | SE Turteni       | SE Turteni    | Rehabilitation and modernisation of power unit no. 3 on lignite           | 2015             | Investment cancelled     |





| No.      | Operator            | Company group | Investment description  | Year of starting | Status of the investment  |
|----------|---------------------|---------------|---|------------------|---|
| RO-Ş-025 | SE Rovinari         | SE Rovinari   | Rehabilitation and modernisation of 330 MW power unit no 4 on lignite | 2013             | Investment effectively started in March 2012 and started the commercial operation in January 2015; Financing Contract concluded on August 29, 2016; Five Reimbursing Requests have been submitted; All five Reimbursing Requests have been verified and approved. The amounts for the first four Reimbursing Requests have been reimbursed and the fifth Reimbursing Request is being reimbursed.                                     |
| RO-Ş-026 | SE Rovinari         | SE Rovinari   | Rehabilitation and modernisation of 330 MW power unit no 5 on lignite | 2014             | Investment cancelled  |
| RO-Ş-027 | SE Mures-CTE Iernut | Romgaz        | New combined cycle with gas turbine (CCGT)                            | 2014             | Project under implementations with final execution in Q2, 2021;<br>The Financing request was submitted in December 2016 and approved in January 2017;<br>Financing Contract concluded on December 7, 2017;<br>Four Reimbursing Requests have been submitted.<br>The first two Reimbursing Requests have been verified, approved and reimbursed the amounts related to them.<br>The other two Reimbursing Requests are under analysis. |



| No.      | Operator    | Company group | Investment description   | Year of starting | Status of the investment  |
|----------|-------------|---------------|--|------------------|---|
| RO-Ş-028 | SE Isalnita | SE Craiova    | Rehabilitation and modernisation of power unit no 7 on lignite | 2013             | Investment started in Q2, 2010<br>Project under implementation with final execution in Q2, 2021;<br>Financing Contract concluded on August 29, 2016;<br>Fiver Reimbursing Requests have been submitted. The first four Reimbursing Requests have been verified and the amount relating to them have been reimbursed. The fifth Reimbursing Request has been submitted in 2020 and it is under analysis. |
| RO-Ş-029 | CET Arad    | CL Arad       | New cogeneration with gas turbine and heat recovery boiler     | 2013             | Investment cancelled  |



### **Conclusions:**

Out of 29 investments initially proposed to be financed through the National Investment Plan, there are:

- ✓ 2 investments (RO- $\text{\$}$ -015, RO- $\text{\$}$ -25) - finalized;
- ✓ 2 investment (RO- $\text{\$}$ -027, RO- $\text{\$}$ -028) - under implementation with final execution in Q2, 2021;
- ✓ 25 investments (RO- $\text{\$}$ -001, RO- $\text{\$}$ -002, RO- $\text{\$}$ -003, RO- $\text{\$}$ -004, RO- $\text{\$}$ -005, RO- $\text{\$}$ -006, RO- $\text{\$}$ -007, RO -  $\text{\$}$  - 008, RO- $\text{\$}$ -009, RO- $\text{\$}$ -010, RO- $\text{\$}$ -011, RO- $\text{\$}$ -012, RO- $\text{\$}$ -013, RO- $\text{\$}$ -014, RO- $\text{\$}$ -016, RO- $\text{\$}$ -017, RO- $\text{\$}$ -018, RO- $\text{\$}$ -019, RO- $\text{\$}$ -020, RO- $\text{\$}$ -021, RO- $\text{\$}$ -022, RO- $\text{\$}$ -023, RO -  $\text{\$}$  - 024, RO- $\text{\$}$ -026, RO- $\text{\$}$ -029) shall be considered as canceled by their beneficiaries from the point of view of the legislation on the implementation of the derogation provided by art. 10c (1) of revised Directive 2003/87/EC.

#### **4. INVESTMENTS FINISHED IN THE ENERGY GENERATION SECTOR IN 2009 - 2020**

From the investments included in the National Investments Plan, two investments have been completely finalized in 2009-2020, respectively:

1. **RO- $\text{\$}$ -015 – New combined cycle with gas turbines – CCCC Brazi with OMV Petrom S.A. as beneficiary.** This power unit started commercial operations in 2012, August 8<sup>th</sup>. This power unit was operational during 2020 and accounted an electricity production of **4,276,639 MWh.**
2. **RO- $\text{\$}$ -25 - Rehabilitation and modernization of the 330 MW power unit no. 4 on lignite - SE Rovinari with Societatea Complexul Energetic Oltenia SA - SE Rovinari as beneficiary.** This project was finalized and has started commercial operations in 2015. This power unit was operational during 2020 and accounted an electricity production of **1,411,976 MWh.**

According to **NIP Procedures**, the technical performance indicators have to be:

- For the Greenfield projects - the CO<sub>2</sub> specific emission (tCO<sub>2</sub>/MWh produced) has to be reduced and it is calculated as difference between the average CO<sub>2</sub> emissions of the power plants on fossil fuels from the National Power System and the CO<sub>2</sub> emissions of the new unit/plant reported to the same yearly quantity of energy. The reference value of the average CO<sub>2</sub> emission of the power plants on fossil fuels from the National Power System is provided by the National Regulatory Authority for Energy (ANRE) and is published annually, for the previous year, on its website.
- For modernization/retrofit projects:
  - ✓ the CO<sub>2</sub> specific emission (tCO<sub>2</sub>/MWh produced) after the investment shall be lower than the CO<sub>2</sub> specific emission before the modernization/retrofit;
  - ✓ reductions in the greenhouse gas emissions is calculated as a difference between the CO<sub>2</sub> emissions of the power units before and after the modernization for the same annual quantity of electricity generated.



The technical performance indicators reported for the finalized investments for 2020, are presented in Table no. 8, below.

**Table no. 8 – Compliance indicators of the finalized investments**

| Investment no. | Investment name   | Year | Achieved technical performance indicators         |   |
|----------------|---|------|---|---|
|                |   |      | CO2 specific emission (tCO <sub>2</sub> /MWh)     | CO <sub>2</sub> emission reduction (tCO <sub>2</sub> /year) |
| RO-Ş-015       | New Combined Cycle with Gas Turbines CECC Brazi, 860 MW                             | 2020 | 0.358832  | 1,377,798   |
| RO-Ş-025       | Rehabilitation and modernisation of 330 MW power unit no 4 on lignite – SE Rovinari | 2020 | 0.7989695 compared to 0.9342 before modernization | 190,942.2261  |

Comparing to Romania's Application where a national emission factor of 0,905 tCO<sub>2</sub>/MWh was used in calculating the emission reductions, for the data presented above it was used the national emission factor of 0.681 tCO<sub>2</sub>/MWh (as published by the National Regulatory Authority for Energy - ANRE for 2019).

## 5. CONCLUSIONS

The National Investment Plan in upgrading Romanian energy infrastructure and clean technologies for 2017, under the derogation provided by the provisions of art. 10c (1) of the Directive 2003/87/EC, amended, is currently under implementation and complying with the Directive requirements.

Out of the 29 investments initially included in the National Investment Plan, 2 investments have been finalized, 2 investments are under different stages of implementation and 25 investments have been cancelled from the point of view of the legislation on the implementation of the derogation provided by art 10c of revised Directive 2003/87/EC.

The National Investment Plan was affected by the modification of the parameters valid at the date of the Application, mainly:

- lack of financing possibilities for some of the proposed projects, due to the worsening financial situation of some Beneficiaries (some NIP Beneficiaries entered under insolvency procedure in the period of 2012-2018);



- the modification of the electricity market structure and the market share more increased got by the renewable energy producers, with an impact on the price of electricity and which has led to give up some NIP projects, mainly in the case of green-field projects;
- disappear of major consumers, mainly in the chemical industry, which led to giving up for making the planned investments (mainly cogeneration projects);
- restructuring and reorganization of power producers based on coal, which led to prioritizing investments in progress and allocation of existing resources to the most profitable projects.

During 2020, the COVID-19 pandemic had a major impact on the implementation of ongoing projects due to the measures adopted by the Romanian authorities, as well as by the authorities of most European countries, namely: quarantine, travel restrictions, closing borders, limiting the transport of non-essential goods, etc. As a result of these exceptional measures, the implementation of investment projects has slowed down due to limited mobility and lack of materials and equipment. Most suppliers have notified beneficiaries that, due to mobility restrictions and difficult shipping conditions, they cannot meet the initial deadlines and implementation schedules.

However, having the legal framework in place and Financing Contracts concluded, the implementation of the derogation under article 10c will continue.

In addition, in relation with the implementation of the National Investment Plan, the Romanian State has as strategic commitments to monitor the achievement of NIP investment as well as to finance of the NIP investments according to the Romanian Application.

