

## **Appendix A: Guidance**

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## **Appendix A1: Review of completeness of Project Proposal**

1. The EIB will review the eligible Proposals to verify that all Application Forms and Submission Forms provided have been satisfactorily completed.
2. In case that any part of the Proposal is incomplete, the EIB will refer back to the Project Sponsor to request outstanding items to be submitted, specifying a deadline of not more than 5 days for receiving a full and complete response.
3. Completion-related clarification questions will be issued after Project Proposals have been received.
4. The EIB will note the results of its completion review in the Project report and its 6 week report to be delivered to the Commission.
5. Incomplete Proposals which have not received a positive response after the completion-related clarification question shall not be further evaluated.

## **Appendix A2: Process for clarification and confirmation**

1. The EIB will undertake financial and technical Due Diligence on Proposals and raise clarification questions where appropriate by filling out the template below.
2. The EIB will address its questions to the Project Sponsor, specifying a deadline for receiving a full and complete response. The EIB will determine the appropriate length of time available to the Project Sponsor to respond. If the query requires agreement with/confirmation from the Member State, then the EIB will take this into account when specifying the deadline.
3. Clarification questions will be issued after Project Proposals have been received and may accompany completion-related queries where the EIB deems this appropriate. Where relevant any implications for the cost of the project as specified in the application, consequent on the clarification in question, should be specified by the Project Sponsor. All responses must be received well in time for the EIB's 9 month report to the Commission.
4. The EIB will note the results of any clarifications in the Project report and update the Commission on any significant issues or developments through its 3 monthly reports. The entire clarification process must be completed prior to the EIB's 9 month report to the Commission.
5. The template on the following page should be used for issuing clarification questions to Project Sponsors.



*Note: Where relevant the Project Sponsor must clearly set out any implications for the cost of the project as specified in the application, consequent on the clarification in question.*

*In the case of review of completeness the project sponsor shall annex to its response all the additional documents and information requested, adequately completed as per the clarification request.*

## **Appendix A3: Technical Due Diligence Guidance**

ATTACHED AS SEPARATE FILE.

## **Appendix A4: Financial Due Diligence Guidance**

ATTACHED AS SEPARATE FILE.

## **Appendix A5: Procurement procedures Due Diligence Guidance**

For all projects the Due Diligence should assess whether:

1. The description of each of the main contracts envisaged is sufficiently detailed with regard to the scope, general conditions, and commercial aspects of the contracts.
2. The procurement procedure to be followed is in conformity with legal requirements and appropriate to the scale and type of contract envisaged.
3. The expected dates for launching the tenders, signing the contracts and the contract execution schedule, together with any guarantees provided, allow for completion of the project on the proposed schedule.

### **Conclusion**

1. Overall, are the procurement procedures appropriate, well planned and in progress such as to allow satisfactory delivery of the Project?
2. Consider whether any matters should be referred to the Commission via the Project report.

## Appendix A6: Initial allocation of Project Proposals

1. Each Project will be allocated to a Project Group, Project Category and Project Sub-category with its NER 300 Funding request.

*For CCS:*

- a. Map all CCS Project Proposals submitted to the EIB on to Table 4 by placing in appropriate cell.
- b. Note the NER 300 Funding request for each project.

For example Project A, a pre-combustion plant based on saline aquifer storage, would be listed in Cell A2 as follows: 'Project A (*Insert NER 300 Funding request*)'.

**Table 4 Initial allocation of CCS Project Proposals**

Source → Storage	(A) Pre-Combustion	(B) Post-Combustion	(C) Oxy-fuel	(D) Industrial Application
(1) <b>Hydrocarbon reservoir storage</b>	<i>Cell A1</i>	<i>Cell B1</i>	<i>Cell C1</i>	<i>Cell D1</i>
(2) <b>Saline aquifer storage</b>	<i>Cell A2</i>	<i>Cell B2</i>	<i>Cell C2</i>	<i>Cell D2</i>

For RES:

- a. Map all Renewable Project Proposals submitted to the EIB on to Table 5 by placing in appropriate cell.
- b. Note the NER 300 Funding request for each project.

For example Project X, a bio-energy plant based on lignocellulose to intermediate solid, liquid or slurry bio-energy carriers via pyrolysis, would be listed in the first row under Column A as follows: ‘Project X (*Insert NER 300 Funding request*)’.

**Table 5 Initial allocation of RES Project Proposals**

	(A) Bio-energy	(B) Concentrated Solar Power	(C) Photo-voltaics	(D) Geo-thermal	(E) Wind	(F) Ocean	(G) Hydro	(H) Distributed Renewable Mngmnt
Sub-category	Lignocellulose – via pyrolysis	Parabolic / Fresnel – using molten salts or other environmentally-benign HTF	Concentrated – 20 MW nominal capacity	Tensional stress fields	Off-shore – minimum turbines size 6 MW	Wave energy – 5 MW	High Temperature Superconducting Generators	Rural environment – solar generation
	Lignocellulose – via torrefaction	Parabolic / Fresnel – Direct Steam Generation	Multi junction Si-thin-film – 40 MW nominal capacity	Compressional stress fields	Off-shore – minimum turbines size 8 MW	Marine / tidal currents energy – 5 MW		Rural environment – wind generation
	Lignocellulose – via gasification	Tower systems-superheated steam cycle	CIGS-based - 40 MW nominal capacity	Enhanced – sedimentary & granite	Off-shore – minimum turbines size 10 MW	OTEC – 10 MW		Urban environment
	Lignocellulose – via directly heated gasification	Tower systems-pressurised air		Enhanced – limestone	Floating off-shore			
	Lignocellulose raw material via entrained flow gasification	Large scale Stirling dish power plant			On-shore – complex terrains			
	Lignocellulose to electricity				On-shore – cold climates			
	Lignocellulose to ethanol & higher alcohols							
	Lignocellulose and/or household waste to biogas, biofuels or bioliquids							
	Algae and/or micro-organisms							

## Appendix A7: Geographical allocation of Project Proposals

1. The geographical location of all Project Proposals submitted to the EIB will be summarised and reported to the Commission. Table 6 will summarise the number of CCS & RES projects submitted under each technology Category in each of the 27 Member States.
2. For example if a Member State submits one Pre-combustion CCS plant, one Trans-boundary Industrial application CCS plants and one photovoltaic renewable project, then this information would appear in Table 6. by putting '1' under Columns B, E and H, in each case accompanied by the appropriate project reference number, and '0' under columns C,D,F,G,I,J,K and L. Column N would total across the row and filled as '3'.

**Table 6 Geographical allocation of all Project Proposals**

(A) Member State	(B) Pre- Combustion	(C) Post- Combustion	(D) Oxy-fuel	(E) Industrial	(F) Bio-	(G) Conc. Solar Power	(H) Photo- voltaics	(I) Geo- thermal	(J) Wind	(K) Ocean	(L) Hydro	(M) Distr. Mngmnet	(N) Total
Member State 1													
Member State 2													
Member State 3													
Member State 4													
Member State 5													
Member State 6													
Member State 7													
Member State 8													
Member State 9													
Member State 10													
Member State 11													
Member State 12													
Member State 13													
Member State 14													
Member													

<b>State 15</b>														
<b>Member State 16</b>														
<b>Member State 17</b>														
<b>Member State 18</b>														
<b>Member State 19</b>														
<b>Member State 20</b>														
<b>Member State 21</b>														
<b>Member State 22</b>														
<b>Member State 23</b>														
<b>Member State 24</b>														
<b>Member State 25</b>														
<b>Member State 26</b>														
<b>Member State 27</b>														
<b>Total</b>														

3. EIB should note any issues or concerns arising from the results of the Geographical allocation in its 3 month report to the Commission.

## Appendix A8: Calculation of Cost Per Unit Performance (CPUP)

This Appendix presents the calculations to be undertaken when deriving the CPUP for:

- (i) CCS demonstration projects
- (ii) RES demonstration projects

Section 1 explains the relevant algebra for CCS demonstration projects, noting its linkages to the Decision, the following section explains where the necessary information is located within the Member State Submission Forms, and suggests validation where applicable.

This process is then repeated for RES demonstration projects.

### 1. Calculation of Cost Per Unit Performance – CCS Demonstration Projects

Article 8(2) of the Decision, notes that the CPUP shall be calculated as the total request for public funding in Euro, plus the best estimate of the net present value of additional benefits resulting from support schemes as calculated according to Article 3(5) of the Decision, divided by Performance, which for CCS demonstration projects is the total projected amount of CO<sub>2</sub> stored in the first ten years of operation.

This may be expressed as the following algebraic statement:-

$$\text{CPUP} = \{\text{RPF} + \text{NPV}_{10\text{years}}(\text{Additional Benefits})\} / \text{Performance}$$

Where RPF is the request for public funding in Euro.

Note: Additional Benefits refers to any benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty, avoided costs (e.g. avoided carbon costs) and existing tax incentive measures as calculated according to Article 3(5) of the Decision, and Performance, for CCS projects as noted above, is the total projected amount of CO<sub>2</sub> stored in the first ten years of operation.

Article 5(3)(b) of the Decision notes that the factor RPF may be expanded as the Relevant Costs (RC), minus any contribution to these costs from the Operator (OC).

The above statement can therefore be expanded to read:

$$\text{CPUP} = \{\text{RC} - \text{OC} + \text{NPV}_{10\text{years}}(\text{Additional Benefits})\} / \text{Performance}$$

Where RC is the Relevant Costs of the project, and OC is the contribution to these costs from the Operator, and NPV<sub>10years</sub> (Additional Benefits) refers to any benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty, avoided costs (e.g. avoided carbon costs) and existing tax incentive measures as calculated according to Article 3(5) of the Decision.

The Relevant Cost for CCS projects, are defined in Article 3 (2) of the Decision. These may be expressed using the following expression:

$$(1) \text{RC}_{\text{CCS}} = \text{CAPEX}_{\text{CCS}} - \text{NPV}_{10\text{years}}(\text{O\&M Benefits} - \text{O\&M Costs})$$

Where:

CAPEX<sub>CCS</sub> means those investment costs which are borne by the project due to the application of CCS.

O&M Benefits means all benefits including the additional revenues due to the application of CCS including energy sales, EHR(Enhanced Hydrocarbon Recovery), including any additional benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty, avoided costs (e.g. avoided carbon costs) and existing tax incentive measures, all during the first 10 years of operation.

O&M Cost are the best estimate of operating costs arising due to the application of CCS during the first 10 years of operation.

Finally we can write out the CPUP algebra for CCS demonstration projects as follows:

$$\text{CPUP} = \{ \text{CAPEX}_{\text{CCS}} - \text{NPV}_{10\text{years}}(\text{O\&M Benefits} - \text{O\&M Costs}) - \text{OC} + \text{NPV}_{10\text{years}}(\text{Additional Benefits}) / \text{total projected amount of CO}_2 \text{ stored in the first ten years}$$

Note: In the case of pre-combustion/industrial application CCS demonstration plant, where the Project involves the construction of a new Integrated Gasification Combined Cycle power plant, the Relevant Costs shall be those extra Investment Costs of that proportion of the Integrated Gasification Combined Cycle to which CO<sub>2</sub> capture, transport and storage has been fitted, compared to the corresponding costs of a supercritical coal-fired power plant without CO<sub>2</sub> capture, transport and storage, sized on an equivalent output basis, net of the net present value of the best estimate of Operating Costs and Operating Benefits of that proportion of the Integrated Gasification Combined Cycle to which CO<sub>2</sub> capture, transport and storage has been fitted arising during the first 10 years, as compared to the corresponding costs of a

supercritical coal-fired power plant, without CO<sub>2</sub> capture, transport and storage, sized on an equivalent output basis.

## **2. Guidance for EIB Assessor on evaluation of the above formula for a CCS demonstration project**

**CPUP** is most easily calculated from the first expression above as **RPF** the Request for Public Funding can be extracted as item 1 from Submission Form 7.

Where,

**NPV<sub>10years</sub> (Additional Benefits)** shall be extracted from item 1 of the relevant Submission Form 5

And

**Total projected amount of CO<sub>2</sub> stored in the first ten years** shall be extracted from item 1 of the relevant Submission Form 6

### **Further validation of data:-**

#### **CCS Projects (other than those involving construction of an IGCC)**

CPUP can then be confirmed using the final expression from Section 1 above where:-

**CAPEX<sub>CCS</sub>** shall be extracted as item 1b of the relevant Submission Form 4.

- This figure should match the Investment Cost as identified on Attachment 1a to Submission Form 4.

#### **NPV<sub>10years</sub> (O&M Benefits - O&M Costs)**

This figure shall be extracted as item 1c of the relevant Submission Form 4

- This figure should be confirmed by discounting the total operating costs and total operating benefits as declared on Attachment 1a to Submission Form 4 by the discount rate notified by the Member State in item 1d of the relevant Submission Form 4.

**OC** shall be extracted from item 1a of the Submission Form 7

And,

**NPV<sub>10years</sub> (Additional Benefits)** shall be extracted from item 1 of the relevant submission form 5

And

**Total projected amount of CO<sub>2</sub> stored in the first ten years** shall be extracted from item 1 of the relevant Submission Form 6

### **CCS Projects (involving construction of an IGCC)**

CPUP can be calculated as per the first expression above, then confirmed as follows:-

**CAPEX<sub>CCS</sub>** shall be extracted as item 1f of the relevant Submission Form 4.

### **NPV<sub>10years</sub> (O&M Benefits - O&M Costs)**

This figure shall be extracted as item 1g of the relevant Submission Form 4

**OC** shall be extracted from item 1a of Submission Form 7

and,

**NPV<sub>10years</sub> (Additional Benefits)** shall be extracted from item 1 of the relevant Submission Form 5

And

**Total projected amount of CO<sub>2</sub> stored in the first ten years** shall be extracted from item 1 of the relevant Submission Form 6

### **3. Calculation of Cost Per Unit Performance –RES Demonstration Projects**

Article 8 (2) of the Decision, as set out in section 5 of this Appendix, notes that the CPUP may be calculated as the total request for public funding in Euro, plus the best estimate of the net present value of additional benefits resulting from support schemes, divided by Performance, which for RES demonstration projects is the total projected amount of energy produced in the first five years of operation.

This may be expressed as the following algebraic statement:-

$$\text{CPUP} = \{\text{RPF} + \text{NPV}_{5\text{years}}(\text{Additional Benefits schemes})\} / \text{Performance}$$

Where RPF is the request for public funding in Euro.

Note: Additional Benefits refers to any benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty,

avoided costs (e.g. avoided carbon costs) and existing tax incentive measures as calculated according to Article 3(5) of the Decision.

Article 5(3)(b) of the Decision notes that the factor RPF may be expanded as the Relevant Costs (RC), minus any contribution to these costs from the Operator (OC).

The above statement can therefore be expanded to read:-

$$\text{CPUP} = \{\text{RC} - \text{OC} + \text{NPV}_{5\text{years}}(\text{Additional Benefits})/\text{Performance}$$

Where RC is the Relevant Costs of the project, and OC is the contribution to these costs from the Operator, and  $\text{NPV}_{5\text{years}}(\text{Additional Benefits})$  refers to any benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty, avoided costs (e.g. avoided carbon costs) and existing tax incentive measures as calculated according to Article 3(5) of the Decision

Relevant Costs for RES projects are defined in Article 3(3) of the Decision, again set out in section 5 of this Appendix. These may be expressed using the following expression:

$$(2) \text{RC}_{\text{RES}} = \text{CAPEX}_{\text{RES}} - \text{NPV}_{5\text{years}}(\text{O\&M Benefits} - \text{O\&M Costs})$$

Where:

$\text{CAPEX}_{\text{RES}}$  is the Investment Costs of the RES demonstration project, net of the Investment Costs of the conventional production, with the same capacity in terms of effective production of energy.

And where:

O&M Benefits means all benefits including due to the application of RES including energy sales and any additional benefits resulting from support schemes even if they do not constitute State aid within the meaning of Article 107(1) of the Treaty, avoided costs (e.g. avoided carbon costs) and existing tax incentive measures during the first 5 years of operation.

O&M Costs are the best estimate of operating costs arising due to the application of RES during the first 5 years of operation.

(O&M Benefits - O&M Costs) are expressed relative to the conventional production with the same capacity in terms of the effective production of energy.

This may be further expanded as:

$$(O\&M\ Benefits_{RES} - O\&M\ Benefits_{REF}) - (O\&M\ Costs_{RES} - O\&M\ Costs_{REF})$$

The Performance is, for the RES demonstration projects, the total projected amount of energy produced in the first five years of operation.

$$CPUP = \{CAPEX_{RES} - NPV_{5years}(O\&M\ Benefits - O\&M\ Costs) - OC + NPV_{5years}(Additional\ Benefits)\} / \text{total projected amount of energy produced in the first five years}$$

#### 4. Guidance for EIB Assessor on evaluation of the above formula for a RES demonstration project

**CAPEX<sub>RES</sub>** shall be extracted as item 1j of the relevant Submission Form 4.

- This figure should match the total investment cost as identified on Attachment 1b to Submission Form 4 less ‘RPCC’ as tabulated on Attachment 2a to the relevant Submission Form 4.

**NPV<sub>5years</sub> (O&M Benefits - O&M Costs)**

This figure shall be extracted as item 1k of the relevant Submission Form 4

- This figure should be confirmed by discounting the total operating costs and total operating benefits as declared on Attachment 1b to Submission Form 4 by the discount rate notified by the Member State in item 1 l of the relevant Submission Form 4.

**OC** shall be extracted from item 1a of the relevant Submission Form 7

**NPV<sub>5 years</sub> (Additional Benefits)** shall be extracted from item 1 of the relevant Submission Form 5

And where:

**Total projected amount of energy produced in the first five years** shall be extracted from item 2 of the relevant Submission Form 6

- This figure should match the total output in MWh tabulated Attachment 1b to the relevant Submission Form 4.

## **Appendix A9: Ranking of Projects to create list of pre-selected Projects**

1. To be undertaken after submission of 6 month report to Commission.
2. The ranking should result in the selection of 8 CCS projects and 34 RES projects. For cases where a given Sub-category has no projects to be ranked, additional projects shall be selected from within the Category of which that Sub-category forms part, as stipulated below

### **A. Ranking of projects**

*For CCS*

Article 8 (2) of the Decision:

For CCS demonstration projects the highest ranked projects shall be selected in order of their ranking, provided the following criteria are met:

- (1) at least one project and at most three projects are selected in each project category;
- (2) at least three projects are selected with hydrocarbon reservoir storage; and
- (3) at least three projects are selected with saline aquifer storage.

3. Table 7 should be completed by placing all CCS projects which have passed Due Diligence in order of increasing CPUP. Additional lines can be inserted or deleted as required.
4. The top eight projects should be selected which do not lead to breach of the requirements of Article 8(2)(a)-(c). Selected projects should be clearly highlighted and depicted through shading in green.
5. The approach for selection is as follows:
  - a. Select the three top-ranked hydrocarbon reservoir Projects and three top-ranked saline aquifer Projects.
  - b. Check if the six Projects selected cover all 4 CCS Categories.
  - c. If this is the case, choose the next two highest ranked Projects in any Category until 8 projects have been selected, but ensure that no more than 3 Projects are selected under a particular Category.
  - d. If this is not the case, note the Category or Categories not represented in the six selected Projects and select the highest ranked Projects in those Categories. Step (c) will now be applicable.

6. In case it is not possible to satisfy the requirements set out in Article 8(2)(a)-(c) due to the nature of Project Proposals received (eg, less than three saline aquifer Projects received or Projects not received for a particular Category), then this should be noted in the 9 month report to the Commission. For ranking purposes, the next highest ranked Project in any Category, ensuring that there no more than three Projects under a particular Category, shall be selected from the remaining projects to complete the eight projects required.

7. An Illustration of this approach is provided after Table 7.

**Table 7 List of CCS Projects which have passed Due Diligence**

(A) No.	(B) Project Name	(C) Technology Category	(D) Storage option	(E) CPUP
1		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
2		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
3		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
4		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
5		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
6		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
7		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
8		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
9		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
10		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
11		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
12		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	
'n'		Pre-combustion/ Post-combustion/ Oxy-fuel/ Industrial Application	Hydrocarbon reservoir /Saline aquifer	

8. Illustration 1:

- a) In the case set out below, Projects A, C & G and Projects B,D & E are selected first as they are the top-ranked saline aquifer and hydrocarbon reservoir Projects respectively.
- b) Of these six, three fall in the Post-Combustion Category, two in Pre-Combustion and one in Oxy-fuel. The next highest ranked Project is F and this is selected as it makes up the third Pre-Combustion Project. However, Projects H, I, J & K cannot be selected as they are all Pre- or Post-Combustion and this would lead to more than 3 projects in that category. Project L, the next highest ranked Project in another Category, is selected to complete the list of eight Recommended Projects.
- c) All selected Projects (A, B C, D, E, F, G & L) are highlighted in green. No industrial application Project is selected as no such Project was received

***Illustration 1: Populated List of CCS Projects which have passed Due Diligence***

(A) No.	(B) Project Name	(C) Technology Category	(D) Storage option	(E) Cost per unit performance
1	Project A	Oxy-fuel	Saline aquifer	
2	Project B	Pre-combustion	Hydrocarbon reservoir	
3	Project C	Post-combustion	Saline aquifer	
4	Project D	Pre-combustion	Hydrocarbon reservoir	
5	Project E	Post-combustion	Hydrocarbon reservoir	
6	Project F	Pre-combustion	Hydrocarbon reservoir	
7	Project G	Post-combustion	Saline aquifer	
8	Project H	Post-combustion	Saline aquifer	
9	Project I	Pre-combustion	Saline aquifer	
10	Project J	Post-combustion	Saline aquifer	
11	Project K	Pre-combustion	Saline aquifer	
12	Project L	Oxy-fuel/	Saline aquifer	
13	Project M	Pre-combustion	Saline aquifer	
14	Project N	Post-combustion	Hydrocarbon reservoir	
15	Project O	Post-combustion	Hydrocarbon reservoir	
16	Project P	Post-combustion	Saline aquifer	
17	Project Q	Post-combustion	Hydrocarbon reservoir	
18	Project R	Pre-combustion	Saline aquifer	
19	Project S	Post-combustion	Saline aquifer	
20	Project T	Pre-combustion	Hydrocarbon reservoir	
21	Project U	Post-combustion	Hydrocarbon reservoir	

For RES:

Article 8(2):

For RES demonstration projects the highest ranked project in each sub-category shall be selected.

9. Table 8 should be completed by placing all Renewable projects under the appropriate technology Sub-category in order of increasing CPUP. Additional lines can be inserted or deleted as required.
10. The highest ranked Project under each Sub-category, should be selected. Selected Projects should be clearly highlighted and depicted through shading in green.
11. If, in any Category, there are Sub-categories where no Projects were received, then the following procedure shall be followed. If n is the number of Sub-categories within the Category for which no Projects were received, then n additional Projects within that Category shall be selected. These shall be the n projects in that Category with the lowest CPUP which have not yet been selected, and which meet the constraint that no two of the n project shall be from the same Sub-category. (In the unlikely event that the number n of Sub-categories for which projects have not been received exceeds the number p of Sub-categories for which projects have been received, then the procedure of the previous sentence should be performed successively, using first p instead of n, and then n-p instead of n.)

**Table 8 List of RES Projects which have passed Due Diligence**

(A) No.	(B) Project Name	(C) Project Sub-category	(D) CPUP score
<b>Bio- energy</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Concentrated Solar Power</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Photo-voltaics</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Geo-thermal</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Wind</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	

'n'		[Insert Sub-category name]	
<b>Ocean</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Hydro</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	
<b>Distributed Renewable Management</b>			
1		[Insert Sub-category name]	
2		[Insert Sub-category name]	
'n'		[Insert Sub-category name]	

## Appendix A10: Calculation of Funding Proportion

1. To be undertaken after submission of 6 month report to Commission.
2. The Funding Proportion is calculated on the 42 projects identified pursuant to Appendix 9.

*For CCS*

3. Table 9 should be completed to obtain the total NER funding requests for the 8 CCS Projects recommended pursuant to Appendix 9.

***Table 9 Pre-selected CCS projects and CCS request for NER Funding***

(A) S.N	(B) Project Category and storage solution <sup>1</sup>	Name of project	(D) NER funding request (In € million)
<b>Carbon Capture &amp; Storage (CCS)</b>			
	<b>Total</b>		<i>[Summation of CCS NER 300 Funding requests]</i>

<sup>1</sup> Categories are Pre-combustion, Post-combustion, industrial application and Oxy-fuel. Storage options are hydrocarbon reservoir and saline aquifer.

For RES

4. Table 10 should be completed to obtain the total NER funding requests for the 34 RES Projects recommended pursuant to Appendix 9.

**Table 10 Pre-selected RES projects and RES request for NER funding**

(A) S.N	(B) Project Category / Sub-category	(C) Name of top-ranking project in Sub-category	(D) NER funding request (In € million)
<b>Renewable Energy Technologies (RES)</b>			
<b>1.</b>	<b>Bio-energy</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>2.</b>	<b>Concentrated Solar Power</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>3.</b>	<b>Photo-voltaics</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>4.</b>	<b>Geo-thermal</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>5.</b>	<b>Wind</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>6.</b>	<b>Ocean</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
<b>7.</b>	<b>Hydro</b>		
a)	[Insert Sub-category name]		
<b>8.</b>	<b>Distributed Renewable Management</b>		
a)	[Insert Sub-category name]		
b)	[Insert Sub-category name]		
c)	[Insert Sub-category name]		
	<b>Total</b>		<i>[Summation of RES NER 300 Funding requests]</i>

For both CCS & RES

5. The Funding Proportion should be calculated between the funding requests received, by value in Euros, for CCS & RES projects recommended pursuant to Appendix 9 as follows:

***Table 11 Funding Proportion between CCS & RES Group***

<p><b>Funding Proportion for CCS Projects =</b></p> <p>summation CCS funding requests for selected projects / (summation CCS funding requests for selected projects + summation RES funding requests for selected projects)</p> <p><b>Funding Proportion for RES Projects =</b></p> <p>summation RES funding requests for selected projects / (summation CCS funding requests for selected projects + summation RES funding requests for selected projects)</p>
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6. The funding proportion would in each case be multiplied by the available funds to determine the funding available for CCS and RES respectively.

## **Appendix A11: Balancing**

1. This step is undertaken after EUAs have been monetised.
2. The need for balancing will depend on whether the total request for NER 300 Funding is more or less than the funds available. This is determined as follows:
  - a. Split total NER 300 Funding available for the First Call into the Funding Proportion defined in Appendix A10 to determine the allocation for CCS & RES Groups respectively.
3. Based on the result of the previous step, the following approach will be adopted:
  - b. If funding requests for all recommended projects are less than the allocation, this is classified as the ‘excess funds’ case. Please see 11.1 below for details on how to proceed in this case;
  - c. If funding requests for all recommended projects are equal to allocation, this is classified as the ‘Sufficient funds’ case. All pre-selected Projects will receive funding under the First Call;
  - d. If funding requests for all recommended projects are greater than allocation, this is classified as the ‘insufficient funds’ case. Please see 11.2 below for details on how to proceed in this case.

### **11.1. Where there are excess funds**

4. In such a case, additional projects will be added to the RES Group and CCS Group. The procedure for this is detailed below.
5. Among the unfunded projects in each Group, the Project representing the lowest CPUP shall be selected first, the Project representing the lowest CPUP in another Category shall be selected next, and the procedure will be repeated until selecting an additional project would lead to a Funding request in excess of the available funds.

### **11.2. Where there are insufficient funds**

Article 8 (3) of the Decision:

Where the total request for funding under this decision is higher than the available funds, the number of selected projects shall be reduced so that the request for funding is reduced in the same proportion in each of the groups referred to in the fourth subparagraph of paragraph 2.

For each of the groups, the project representing the highest cost per unit performance shall be deselected first, the project representing the highest cost per unit performance in another category shall be deselected next; the procedure shall be iterated until the requested funding is covered by the available funds.

***For CCS:***

6. Calculate the difference between the summation of CCS NER 300 Funding requests from all recommended projects ( $R_c$  in the explanation below) and the allocation for CCS Group ( $A_c$  in the explanation below) to determine the Funding shortfall for CCS Group ( $S_c$  in the explanation below);
7.  $S_c = (R_c - A_c)$
8. Refer to Table 9 List of pre-selected CCS Projects and delete the lowest ranked of the pre-selected Projects (highlighted in green), unless that would lead to a situation where not all conditions in Article 8(2)(a)-(c) were met.

In the latter case, delete the next lowest ranked of the pre-selected Projects, unless that also would lead to a situation where not all conditions in Article 8(2)(a)-(c) were met, in which case repeat this sub-step until either one project has been deleted or all projects have been examined.

In the latter case, i.e. where deletion of *any* remaining pre-selected Project would lead to a situation where not all conditions in Article 8(2)(a)-(c) were met, delete the lowest ranked of the pre-selected Projects.

9. Calculate the revised summation of CCS Funding requests ( $R_c'$ ).
10. Calculate the revised Funding shortfall for CCS Group ( $S_c'$ )
11. If revised Funding shortfall for CCS Group ( $S_c'$ ) is zero (or negative<sup>2</sup>), then stop.
12. If revised Funding shortfall for CCS Group ( $S_c'$ ) is not zero (or negative), then repeat step 8.
13. Calculate the second revision of Funding shortfall for CCS Group ( $S_c''$ )
14. Repeat the steps above till the revised Funding shortfall for the CCS Group is zero (or negative).
15. Update Table 9: Pre-selected CCS Projects as per the results of this balancing.

***For RES:***

1. Calculate the difference between the summation of RES NER 300 Funding requests from all Recommended Projects ( $R_r$  in the explanation below) and the

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<sup>2</sup> The application of the formula for calculating shortfall may lead to a negative number through the process described in this section due to the size of concerned projects. Please refer to the Special case described at the end of this Appendix for further details on how to tackle this situation.

allocation for RES Group ( $A_r$  in the explanation below) to determine the funding shortfall for RES Group ( $S_r$  in the explanation below);

2.  $S_r = (R_r - A_r)$
3. Review the Project rankings by Sub-category in Table 10 List of pre-selected RES projects and identify any Sub-categories for which there is more than one recommended project.
4. Delete a pre-selected project in turn from each of those Sub-categories, starting with the lowest-ranked pre-selected project, continuing with the lowest-ranked pre-selected project in a Sub-category other than where a deletion has been made, and so on. After each deletion:
  - a. Calculate the revised summation of RES Funding requests ( $R_r'$ ).
  - b. Calculate the revised Funding shortfall for RES Group ( $S_r'$ )
  - c. If revised Funding shortfall for RES Group ( $S_r'$ ) is zero (or negative<sup>3</sup>), then stop.
  - d. If any Sub-category no longer has more than one pre-selected project, remove it from the process under this step.

If a pre-selected project in all Sub-categories has been removed in the process, but the Funding shortfall is still positive, then proceed to Step 5.

*[Note: this step is necessary to ensure that any 'additional' projects added due to a lack of applications in certain categories or sub-categories, are the first to be deleted due to lack of funds.]*

5. The following process should be followed:
  - a. Delete the lowest ranked of the pre-selected projects.
  - b. Calculate the revised summation of RES Funding requests ( $R_r'$ ).
  - c. Calculate the revised Funding shortfall for RES Group ( $S_r'$ )
  - d. If revised Funding shortfall for RES Group ( $S_r'$ ) is zero (or negative<sup>4</sup>), then stop.
  - e. If the revised funding shortfall for RES Group ( $S_r'$ ) is not zero (or negative), then delete the next lowest ranked pre-selected project in a Category other than where a deletion has been made.

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<sup>3</sup> The application of the formula for calculating shortfall may lead to a negative number through the process described in this section due to the size of concerned projects. Please refer to the Special case described at the end of this Appendix for further details on how to tackle this situation.

<sup>4</sup> The application of the formula for calculating shortfall may lead to a negative number through the process described in this section due to the size of concerned projects. Please refer to the Special case described at the end of this Appendix for further details on how to tackle this situation.

- f. Repeat the steps above till the revised funding shortfall for RES Group is zero (or negative).
6. Update Table 10: List of pre-selected RES Projects as per the results of this balancing.

7. *Illustration 2:*

- a) For example in the case of a Funding shortfall for RES Group, delete the project with the highest CPUP score. Hence, A3 with a CPUP score of 100 is deleted below.
- b) If there is still a shortfall, then the next deletion would be B3.
- c) Note that A2, which has a lower CPUP score than B3 would remain as it falls under the same (bio-energy) Category as the first deletion

***Illustration 2: Balancing for RES Projects***

Sub - Category	(A) Bio-energy	(B) Conc. Solar Power	(C) Photo-voltaics	(D) Geo-thermal	(E) Wind	(F) Ocean	(G) Hydro	(H) Dist. Renewable Mngmnt
1.	A1	B1	C1	D1	E1	F1	G1	H1
2.	A2 (95)	B2	C2	D2	E2	F2	G2	H2
3.	A3(100)	B3 (85)	C3 (80)	D3 (75)	E3 (70)	F3 (65)	G3 (60)	H3 (55)

**11.3 Special case- Carry-forward of Group funds to Second Call**

1. In the special case that the Commission & EIB find that the de-selection of one or more projects to make up the Funding shortfall by Group results in an allocation that is less than the amount available, i.e (revised) Sc or Sr is negative, then the remainder will be carried over to the Second Call as a reserved amount pre-assigned towards that Group.
2. Illustration 3:
- a) Let the total NER 300 allocation for the First Round, following monetisation by the EIB, be 100 Euros.
- b) Let the Funding Proportion between all projects that have concluded positively the Due Diligence be 3:2. So the allocation to each group should be
- CCS Group ( $A_c$ ) = 60 Euros
  - RES Group ( $A_r$ ) = 40 Euros

- c) For simplicity, let the Funding requests from pre-selected projects be as follows<sup>5</sup>:
- For CCS: 120 Euros (three projects requesting 40 Euros each)
  - For RES: 80 Euros (sixteen projects requesting 5 Euros each)
- d) The eight RES projects with the highest CPUP in different Categories would be de-selected in this case, bringing their request down to 40 Euros.
- e) Two CCS projects would also need to be de-selected to maintain the Funding Proportion and bring the request for pre-selected CCS Projects down to 60 Euros. However, as each of the CCS Projects requests 40 Euros, the de-selection would actually bring the Award Decision for CCS Group in the First Call down to 40 Euros.
- f) This would result in an allocation of 80 Euros, leaving 20 Euros unutilised in the First Round. These 20 Euros would be carried forward to the second Call, but reserved for CCS.

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<sup>5</sup> This illustration relates to a simplified case. The Commission's expectation is that number of Recommended Projects at this stage would be at least 8 for CCs & 34 for RES, though this may or may not be achieved