

TENDER GUIDE CARBONBID



EUROPEAN TENDER FROM
PORT OF ROTTERDAM N.V.



**Port of
Rotterdam**

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Introduction

Carbonbid is a European tender issued by Port of Rotterdam. This document contains all the information about Carbonbid that is necessary to submit a proposal for Carbonbid. It outlines the purpose of Carbonbid, the process, and the criteria that a proposal must meet. Additionally, it explains how the evaluation and award process work and outlines the applicable rights and obligations.

The document is structured as follows:

Chapter 1 describes the purpose of Carbonbid and clarifies key definitions;

Chapter 2 outlines what we are looking for and the minimum requirements;

Chapter 3 details the entire process of Carbonbid: from application to contract signing and implementation; and

Chapter 4 describes the legal framework, the type of tender, and our reservations and rights.

Additional clarifications and documents can be found in **the Annexes**. Annex A contains the glossary of terms.

1 What do we want to achieve?

Port of Rotterdam aims to reduce greenhouse gas emissions in the Rotterdam port area. We want to achieve this while maintaining an attractive investment climate.

Carbonbid is a new initiative with the goal of:

Reducing as many greenhouse gases as possible in the port emission area before January 1, 2030.

Carbonbid accelerates emission reduction by co-financing the most effective solutions that achieve reductions. These solutions are proposed and implemented by the participants themselves. This support lowers the threshold for companies to actually carry out their reduction solutions.

The most effective proposals that meet the conditions and quality requirements of Carbonbid will be eligible for financial support. Winners of Carbonbid will be offered a standard contract for the implementation of their solution. Participants remain responsible for carrying out their own projects.

Port of Rotterdam has allocated a total budget of € 3.5 million for Carbonbid.

1.1 What do we mean by reduction?

By reduction, we mean the actual decrease in greenhouse gas emissions from existing activities and the removal of greenhouse gases from the atmosphere. Relocating emissions does not count as reduction. The reduction must be measurable and demonstrably contribute to lowering total emissions within the port emission area.

1.2 What do we mean by greenhouse gases?

Greenhouse gases are gases that contribute to global warming. For Carbonbid, we use the standard definitions and conversion factors provided by the Intergovernmental Panel on Climate Change (IPCC), which are also used in the Corporate Sustainability Reporting Directive (CSRD).

The climate impact of different greenhouse gases varies. To allow proper comparison, all emissions are converted to CO₂ equivalents (CO₂e). This means the contribution of each gas is weighted based on its Global Warming Potential (GWP) relative to CO₂.

Within Carbonbid, all reduction solutions are assessed based on their impact in tonnes of CO₂e, enabling a uniform comparison between different solutions.

Examples of greenhouse gases and substances can be found in Table 1. A full list of eligible gases for Carbonbid and their conversion factors to CO₂e is included in Annex B.

Tabel 1: Greenhouse gasses Carbonbid

Greenhouse gas	Chemical formula
Carbon Dioxide	CO ₂
Methane	CH ₄
Nitrous Oxide	N ₂ O
Hydrofluorcarbons	Several gasses
Perfluorcarbons	Several gasses
Sulfur Hexafluoride	SF ₆
Nitrogen Trifluoride	NF ₃

1.3 What do we mean by the port emission area?

The port emission area is the geographical zone in which we aim to reduce greenhouse gas emissions from existing activities. This area includes port sites, harbor basins, waterways, and infrastructure of the Port of Rotterdam, where emissions are generated by, among other things, industrial processes, transport, transshipment, and storage activities. The precise geographical boundaries of the port emission area can be found via [\[THIS\]](#) link.

1.4 Why before January 1, 2030?

Carbonbid is a new initiative focused on accelerating the reduction of greenhouse gases in the short term, with concrete impact before 2030.

We have chosen to support reduction solutions that can be implemented quickly and have an immediate positive impact on the climate. This contributes to developing a competitive and future-proof port and helps companies better prepare for upcoming climate legislation and regulations.

2 What are we looking for?

The approach of Carbonbid is solution-neutral; no specific solutions or technologies are prescribed, nor is there any preference for particular types of solutions. Participants are fully responsible for the implementation of their reduction solution, and only the result is rewarded by Carbonbid. We believe that organizations know their own operations best and therefore are best placed to determine:

- Which solution(s) can effectively reduce greenhouse gases.
- How much reduction (in tonnes of CO₂e) they can achieve before 2030.
- What funding amount (€) they need to implement their solution.

To optimize the use of the available budget, the bid price of a proposal is an important evaluation criterion. We are not only looking at the total CO₂e reduction a solution offers, but also at our contribution per reduced tonne of CO₂e. The bid price is calculated as follows:

Bid price (€ per tonne CO₂e) = Requested funding (€) ÷ Expected reduction (tonnes CO₂e)

The lower the bid price, the more cost-effective the proposal. Lower bid prices enable greater reduction within the available budget and support efficient allocation of funds. Carbonbid is open to all effective solutions that lead to greenhouse gas (CO₂e) reduction, provided they meet the following minimum requirements:

✓ The reduction takes place within the port emission area

The reduction of greenhouse gas emissions from existing activities and/or the removal of greenhouse gases from the atmosphere must occur within the defined geographical boundaries. Reductions outside this area will not be considered.

✓ The reduction occurs before January 1, 2030

Only reductions achieved during the implementation period, starting from the contract signing until January 1, 2030, will be considered.

✓ The reduction is measurable, demonstrable, and verifiable

The reduction must be expressible in tonnes of CO₂e, demonstrably achieved, and auditable by an independent accountant.

✓ The reduction must be at least 100 tonnes of CO₂e

We apply a minimum threshold to keep X manageable and to limit administrative and evaluation costs. Only solutions achieving more than 100 tonnes of CO₂e reduction during the implementation period are eligible.

✓ The requested funding may not exceed € 700.000

Participants determine their own funding request. We apply a maximum amount (1/5 of the total € 3.5 million budget) to ensure the budget is distributed across multiple proposals.

✓ The bid price may not exceed € 300 per tonne CO₂e

We apply an upper limit to exclude overly expensive solutions and ensure efficient budget spending.

If any of these minimum conditions are not met, the proposal will not be eligible for the tender. They are knock-out criteria.

There is a wide variety of solutions available on the market, and we are looking for those that truly contribute to our goal. Therefore, we are seeking proposals that meet the following conditions:

✅ **The reduction does not involve emissions covered by emission allowances (EU ETS)**

The European Emissions Trading System (ETS) already provides a financial mechanism to reduce emissions. Carbonbid focuses on additional reductions outside the scope of ETS obligations.

✅ **Implementation has not yet started**

Carbonbid is designed to enable reduction solutions that would not otherwise be realized. Projects that have already started clearly do not need financial support to be executed.

✅ **The solution does not shift emissions to other locations without actual reduction**

Relocating emissions without a net decrease does not contribute to CO₂e reduction and therefore falls outside the scope of Carbonbid.

✅ **The solution does not include measures already required by existing laws or regulations**

Carbonbid supports additional emission reductions. Mandatory measures must be carried out by companies regardless and are therefore not eligible. This refers to obligations that are already known and implemented during the Carbonbid process and that will be applicable before January 1, 2030.

✅ **The solution is immediately implementable**

Carbonbid focuses on solutions that can be directly applied and have an impact before 2030. Research or technological development without concrete implementation within this period is not within the scope of Carbonbid.

If your solution does not meet these criteria, it will not be eligible for the tender. These are knock-out criteria. The full list of minimum requirements can be found in Annex C.

Who is Carbonbid intended for?

Carbonbid is open to all parties with solutions that meet the minimum requirements listed in Annex C, and who are capable of implementing the solution themselves.

Eligible applicants include:

- Companies based in the Port of Rotterdam
- Port users, such as shipping companies, inland waterway operators, transport companies, etc.
- Any other parties with reduction solutions, such as technology developers or service providers

❌ Excluded are parties for whom there may be a conflict of interest. Any parties over whom Port of Rotterdam have policy-making influence are excluded from participation. This is a ground for exclusion and therefore also a knock-out criterion.

✅ If you have more than one good idea, you may submit a second proposal for Carbonbid.

A maximum of two proposals per applicant is allowed.

3 What does the Carbonbid process look like?

What is the purpose of the process?

The purpose of the entire process is to conclude contracts with the applicants offering the most effective reduction solutions. To keep the process clear and manageable and to avoid requiring too much effort all at once, we've broken it down into smaller steps. These steps are called phases. An overview of the full process and its phases is shown in Figure 1. Everyone participating in Carbonbid (including us!) must adhere to this process.

Figure 1: The Carbonbid process



PHASE 3



Meeting with the accountant

Parties with selected proposals are invited for a meeting about the measurability, demonstrability, and verifiability of their proposal.



Assessment phase 3

The accountant assesses whether the proposal can be verified after the implementation period. Proposals that meet the criteria proceed to phase 4.

PHASE 4



The winners are offered a contract

Contracts are awarded in order of bid price until the budget is depleted. The winning parties are offered a contract and receive 40% of their requested amount.



The parties implement their reduction solution before 2030



Final verification of reduction result

After the implementation period, an accountant verifies whether the reduction has been achieved.



Remaining payment based on results

After verification, participants receive the remaining amount (up to 60%), depending on the achieved reduction results.

What do you need to do and submit during the process?

The process consists of four phases, during which we gradually request more information about the solution described in your proposal. If you successfully complete all phases, we will offer you a contract to implement your solution. At that point, the tender process is concluded.

- We start with an informative start-up meeting, which is open to everyone but not mandatory. The meeting will be recorded, and an anonymized transcript will be shared. The date of the start-up meeting is listed in Table 2.
- We use the MerCell procurement platform for Carbonbid. MerCell is publicly accessible via this [\[LINK\]](#). You must register to participate in Carbonbid, as all communication will go through this platform. You will submit your documents through MerCell and receive our evaluations there.
- The user guide for MerCell is available right after you log in.
- During the process, you may ask questions. Please formulate them as clearly as possible. All questions and our responses will be shared with everyone in a document on MerCell, called the Nota van Inlichtingen (Information Notice). These answers are binding throughout the rest of the process.
- When submitting your proposal, you must comply with the formatting requirements, which are:
 - The proposal is submitted on time,
 - The proposal is fully completed,
 - The required templates provided by us are used,
 - The proposal is written in English or Dutch.

These formatting requirements apply to all phases of the process. If your proposal does not meet them, it will not be eligible for award.

- We always provide a justification for our decisions.
- If you disagree with a decision during the process, you may file an objection at the end of phases 1, 2, and 3.
- Please carefully review the contract. It contains the terms we want to agree upon if you win. The contract is available on MerCell.

How do we assess?

In each phase, we assess your input differently. The assessment method for each phase is explained in this chapter.

When do you need to act or submit something/what is the timeline?

The entire process takes approximately 10 months. Key dates and deadlines are listed in Table 2. Of course, unexpected delays may occur. If there are any changes to the timeline, we will inform you via MerCell. Interested parties and applicants (that's you!) cannot appeal to the original schedule if changes are made.

Table 2: Key Dates

Date / Period	Activities
Phase 1	
01-05-2025	Publication of Carbonbid, phase 1 submission opens
21-05-2025	Start-up meeting from 09:30 to 11:00
23-05-2025 before 23:59	Deadline for submitting questions about phase 1
06-06-2025	Responses to questions via the Information Notice

18-07-2025 before 12:00	Deadline for submitting proposals (phase 1)
21-07-2025 to 01-08-2025	Evaluation of Phase 1 submissions
01-08-2025	Results of Phase 1 announced
02-08-2025 to 30-08-2025	Objection period Phase 1
Phase 2	
17-09-2025 before 23:59	Deadline for submitting questions for phases 2 & 3
19-09-2025	Responses to questions via the Information Notice
06-10-2025 before 23:59	Deadline for submitting phase 2 proposal
09-10-2025 to 29-10-2025	Presentations for phase 2
29-10-2025	Results of phase 2 announced
30-10-2025 to 18-11-2025	Objection period phase 2
Phase 3	
19-11-2025 to 03-12-2025	Accountant review sessions
03-12-2025	Results of phase 3 announced
04-12-2025 to 31-12-2025	Objection period phase 3
Phase 4	
05-01-2026	Contract signing begins

3.1 Phase 1: the 2-pager phase

What is the goal of this phase?

The goal of this phase is to gain insight into the submitted proposals. We will assess whether your proposal meets the minimum requirements and whether it is of sufficient quality.

What do you need to do and submit?

In this phase, you must complete 4 things:

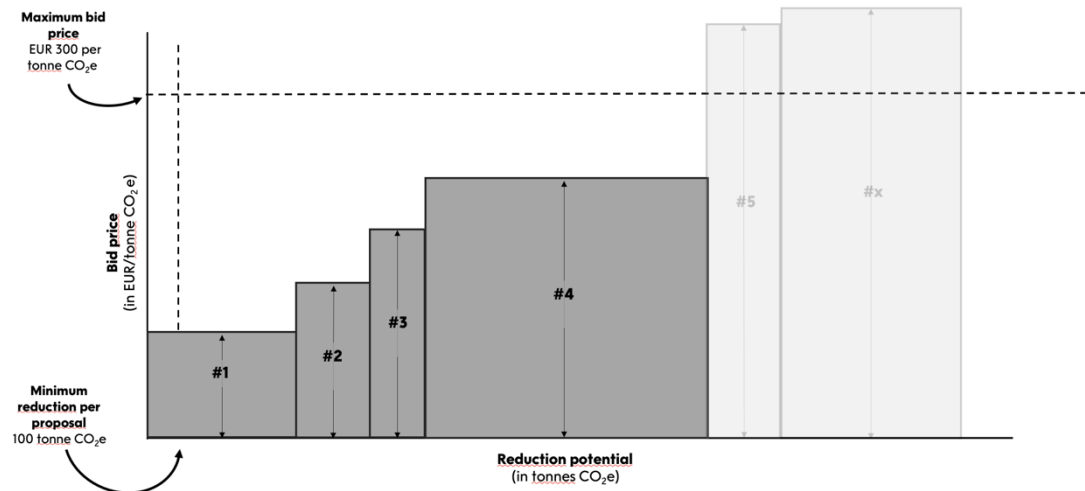
1. Submit a 2-page template in which you explain your proposal. Use the template we provide. In this document, you describe your solution, how much CO₂e you plan to reduce, and the financial contribution you are requesting from us.
2. Submit a declaration confirming that your proposal complies with the minimum requirements. These are listed in Annex C, so please read them carefully!
3. Submit a completed and signed version of the European Single Procurement Document (ESPD). Attention: this must be filled out correctly in one go. Instructions are available on Mercell to assist you.
4. Submit a declaration of agreement with the draft contract, including all its attachments.

How do we assess this phase?

Once all proposals have been submitted, we evaluate them. We first check whether your proposal complies with the formatting requirements. Then, we verify whether your proposal meets the minimum requirements, and whether items 2, 3, and 4 above are completed. If any of these are missing, your proposal will unfortunately be rejected. Next, we assess whether your proposal is feasible, effective, and/or implementable. If your proposal meets these criteria, it will proceed to the ranking phase. If we have doubts about either of these criteria, your proposal will still proceed to the ranking phase.

The ranking is based on the bid price (see Figure 2). The lowest bid price will be ranked number 1, the next lowest number 2, and so on.

Figure 2: example: how does the ranking work?



If a large number of proposals are positively assessed, the chances of receiving a contract are lower for proposals with a high bid price. To ensure that the effort required to participate in Carbonbid is proportionate to the chances of winning, we reserve the right to judge a maximum total of € 10.5 million (3x the Carbonbid budget) worth of proposals and allow them to proceed to phase 2. We will use the ranking based on bid price to determine this. If more than 30 proposals meet this threshold, we reserve the right to limit progression to phase 2 to only the top 30 proposals. Proposals outside this limit will be rejected. You will always be informed of the reason if you are not progressing to the next phase.

3.2 Phase 2: the jury phase

What is the goal of this phase?

The purpose of this phase is to evaluate your submission based on quality and feasibility, ensuring that we have sufficient confidence in your ability to realize the proposed solution. An independent and expert jury will assess all proposals. The responsibility for implementation remains with you.

What do you need to do and submit?

In this phase, you must complete 5 things, the first of which is optional:

1. You may adjust the requested funding amount and/or reduction volume. The bid price (funding amount divided by CO₂e reduction) may deviate by a maximum of 20% from the phase 1 bid. This is optional. The proposal content itself may not change.
2. Submit the "Reduction Justification" – an Excel template we provide. This must explain how you calculate the reduction, the timeline for achieving it, and any assumptions made.
3. Submit a PowerPoint presentation (maximum 15 slides) covering at least the following:

- **Current Situation and Context:** Explain the current situation in which your solution will be applied.
 - **Core of the Solution:** Clearly describe the solution. This can be a new product, service, technology, process, or method. Specify where and how the solution will be applied and how it contributes to emission reduction.
 - **Technological and/or Methodological Justification:** Describe the technology or methodology behind the solution. Demonstrate that it is based on proven and reliable methods or technologies.
 - **Side Effects:** Discuss any potential side effects of the solution, showing awareness of broader impacts.
 - **Structural Impact:** Indicate whether the solution has a structural, ongoing impact or is a one-time reduction.
 - **Explanation of the Reduction Justification:** Provide details on how the Excel template was completed, including any calculations and CO₂e conversions.
 - **Bottlenecks:** Describe key risks or obstacles to implementation and how you plan to mitigate them.
4. Deliver the presentation in person to the jury within 30 minutes. A maximum of two people may attend.
 5. Participate in a 15-minute Q&A session with the jury immediately following your presentation. The presentation and Q&A together will last no longer than 45 minutes. Both are recorded and stored until the contract is signed.

How do we assess this phase?

An independent jury of at least 3 members will assess the presentation, the Reduction Justification, and the Q&A. The assessment is carried out as follows:

1. Jury members are given a work instruction with evaluation criteria, including:
 - Quality of presentation content
 - Quality of answers during the Q&A
 - Feasibility of the solution based on the Reduction Justification
 - Reliability of the solution and justification
2. After the presentation, each jury member makes an individual assessment based on the evaluation criteria described above.
3. These assessments are then discussed in a joint meeting to ensure consistency in the jury's evaluation approach.
4. A joint decision is made on whether your proposal advances to phase 3. A negative decision may be based on one or more evaluation criteria.

The jury's decision is final, and we will inform you accordingly. If your proposal is accepted, you proceed to phase 3. If your bid price was adjusted in this phase, proposals will be re-ranked using the same methodology as in phase 1.

3.3 Phase 3: the accountant phase

What is the goal of this phase?

The goal of this phase is to verify that the proposed CO₂e reduction is measurable, demonstrable, and verifiable by the end of the implementation period. This is essential, as payment is conditional upon

final verification. An independent accountant, specialized in greenhouse gas emissions, will conduct this review. Costs are covered by us.

What do you need to do and submit?

In this phase, you must complete 2 things:

1. Participate in a 60-minute meeting with the accountant (duration may vary based on proposal complexity). The accountant will contact you to schedule.
2. Provide any additional information requested by the accountant. Once sufficient documentation has been received, you will receive confirmation.

How do we assess this phase?

The accountant advises whether the reduction is measurable and demonstrable and verifiable. We always follow the accountant's advice. A positive result moves you to phase 4: the intention to award.

We will inform you via Mercell whether you advance to phase 4, including your final ranking, whether your proposal fits within the available budget, and the reasoning behind the decision.

This is also your final opportunity to object to the process of phase 3. The assignment is only officially awarded once the contract is signed by both parties.

3.4 Phase 4: the contract phase

What is the goal of this phase?

The goal of this phase is to conclude a contract with applicants who received a positive evaluation in phase 3, enabling implementation of their solution. The draft contract and execution terms are available on Mercell.

What do you need to do and submit?

In this phase, you will only do 1 thing:

1. Sign the standard contract. A formal signing event will be organized.

How do we assess this phase?

Contracts are offered in order of bid price: the lowest bid first, followed by the next lowest, etc. This mechanism is shown in Figure 2. If a proposal slightly exceeds the € 3.5 million budget, we may extend the budget by up to € 700.000 to accommodate the solution.

If a selected applicant withdraws, the next eligible proposal in the ranking will be invited to contract.

Legally, this is called the negotiation phase. We may negotiate logistical aspects, such as the date of signing, but not the contract conditions, bid price, or funding amount. Summaries may be made of any discussions, and these will become part of the final contract.

4 Legal frameworks Carbonbid

4.1 Type of Procurement

Carbonbid is a European tender and follows the procedure of a Design Contest. The legal conditions for design contests are described in Articles 2.42, 2.43, and 2.157–2.163 of the Dutch Public Procurement Act 2012. A design contest is a specific form of procurement in which we request solutions aimed at reducing CO₂e in the port emission area. We conducted a market consultation to assess the feasibility of Carbonbid and to determine whether potential applicants would be interested in submitting proposals. A report of this consultation is included in Annex D.

A design contest procurement works as follows:

- **Challenge:** An organization identifies a problem or need. In this case, we are seeking a service—specifically, the reduction of CO₂e in the port emission area. The scope of our procurement is to reduce as many greenhouse gases as possible in the port emission area before January 1, 2030.
- **Solutions:** Anyone with a solution that meets the minimum requirements may submit a proposal.
- **Evaluation:** A jury evaluates the submitted proposals based on pre-established criteria. The award criterion is the lowest price.
- **Award:** The best solutions receive financial support to implement their proposals.

We are a special-sector company under the Dutch Public Procurement Act 2012 (AW 2012) and for this procurement we follow the Design Contest Procedure, referring to the AW 2012 and the 2016 Utilities Procurement Regulation (ARN 2016), version 1.0.

Deviations from ARN 2016

There are several deviations from ARN 2016 for this procurement. For example, Article 5 does not apply. Both Dutch and English are used throughout this procedure. Additionally, in the event of summary proceedings (kort geding) against the award decision, the validity of your proposal (standstill period) must be extended to two weeks after the court ruling. This is in addition to Article 15. If a dispute arises concerning this procurement, it must be submitted to the (preliminary relief judge of the) District Court of Rotterdam. A dispute is officially initiated once a writ of summons is issued. This supplements Article 21.1.

4.2 General Provisions for Carbonbid

Only the conditions we have specifically established apply to this procurement. Any other general or special terms, such as those from the applicant, do not apply and will not be accepted. This applies to all aspects of the tender, award, and contracting.

The following general provisions apply to Carbonbid:

1. By submitting a proposal, you automatically agree to all rules and terms of this procurement process, including all tender documents, annexes, and addenda.
2. We reserve the right to exclude proposals that are incomplete, incorrect, or in violation of the procurement rules.

3. All submissions are treated confidentially. Only staff directly involved in the tender have access, including the accountant. If we communicate with third parties about submissions, this will always be done anonymously.
4. If you discover an error in the tender documents, report it as soon as possible via a question on Merccell. If the Information Notice deadline has passed, use the messaging module. If you fail to report the error in time, no rights can be derived from it.
5. This Tender Guide takes precedence over any conflicting information on the procurement platform, except regarding submission deadlines and published Information Notice documents.
6. The Information Notice includes all relevant information published on the platform under the sections Questions, Notices, and/or Annexes.
7. In case of inconsistencies between Information Notice documents, the most recent version prevails.
8. In the event of a procedure/dispute, the Dutch-language versions of the documents are legally binding.

4.3 Reservations and Rights

As unforeseen scenarios may arise, we have established several reservations and rights for Carbonbid. These are described below. We reserve the right to apply or not apply them at any time.

Scenario 1: A proposal's requested amount slightly exceeds the budget, meaning it would not be eligible for a contract, even though the solution is promising. To avoid inefficient budget allocation, we reserve the right to increase the procurement budget by up to one-fifth (1/5) in case of over-subscription.

Scenario 2: If significantly fewer proposals are submitted than expected and the budget is not fully utilized, we reserve the right to suspend the procedure and/or only partially award contracts, without compensating participants. This supplements Article 18.1 of ARN 2016.

Scenario 3: If significantly more proposals are submitted than expected, the assessment workload could become too great. To manage this, we reserve the right to initially rank proposals based on bid price and only assess those that fall within the first € 10.5 million. Proposals beyond this threshold will not be evaluated and will be excluded. This ensures a manageable process and transparency regarding your chances of contracting.

Scenario 4: Even after limiting proposals to the € 10.5 million cap, many could still qualify for Phase 2. To manage the jury's workload, we reserve the right to limit phase 2 to a maximum of 30 proposals.

Scenario 5: To prevent extremely low bid prices in Phase 1 aimed solely at advancing to phase 2, we require that bid prices in phase 2 may deviate by no more than 20% from those submitted in phase 1.

Scenario 6: Multiple proposals may target the same emission source; however, reduction can only occur once. To prevent overlap, we ask participants to describe the relevant emission source. If two competing proposals target the same source, we reserve the right to exclude the proposal with the higher bid price.

4.4 Overview of Annexes

- A. Glossary of Terms Carbonbid
- B. CO₂-equivalents and conversion factors
- C. Minimum requirements Carbonbid
- D. Market consultation report

Annex A: Glossary of Terms Carbonbid

Term	Description
applicant	The party submitting a proposal. This may be one or more entities.
bid price	The requested amount divided by the quantity of CO ₂ e reduced during the implementation period.
budget	The total amount of funding available for Carbonbid, in Euros.
CO ₂ -equivalents (CO ₂ e)	Emissions of various greenhouse gases converted into CO ₂ e units using conversion factors, listed in Annex B.
contract	The contract we offer to the winning applicants to implement their solution. Available on Merccell.
conversion factors	The calculation factors used to convert various greenhouse gases to CO ₂ e, making them comparable in terms of climate impact.
final verification	The audit of the reduction volume at the end of the implementation period.
greenhouse gases	Gases that contribute to global warming. See the definition of CO ₂ e.
implementation period	The period in which a solution is implemented according to the signed contract between the applicant and the Port of Rotterdam.
Information Notice (Nota van Inlichtingen)	A document containing all submitted questions and our answers, made publicly available.
Merccell	The digital procurement platform used for Carbonbid.
minimum requirements	The minimum conditions a proposal must meet to be eligible for Carbonbid, as listed in Annex C.
over-subscription	A situation in which the total requested funding exceeds € 10.5 million.
port emission area	The reduction takes place within the boundaries of the port emission area. (LINK)
proposal	What you submit in phase 1 to participate in Carbonbid.
ranking	The sorting of proposals based on bid price, from lowest to highest.
reduction	The lowering of greenhouse gas emissions from existing activities and/or the removal of greenhouse gases from the atmosphere.
Reduction Justification	The Excel template provided by us in which applicants justify the projected reduction of their solution.
reduction solution	See the definition of Solution.
reduction volume	The total number of tonnes of CO ₂ e reduced during the implementation period.
requested amount	The amount an applicant requests from the Port of Rotterdam to implement the solution.
solution	The specific measure, technique, or approach that leads to CO ₂ e reduction.
standstill period	The validity period of a submission. The period starts at the final submission date of phase 2, and lasts 120 days.
submission	The proposal submitted to the Port of Rotterdam to participate in Carbonbid.
Tender Guide	The legal document outlining the rules for participating in Carbonbid.

winners	The parties whose proposals are selected and to whom a contract is offered by the Port of Rotterdam.
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Annex B: CO₂-equivalents and conversion factors

Group	Greenhouse gas	Chemical formula	Conversion factor
1	Carbon dioxide	CO ₂	1
2	Methane (fossil)	CH ₄	30
3	Nitrous oxide	N ₂ O	273
4	Hydrofluorocarbons (HFCs)		
	HCFC-22	CHClF ₂	1760
	HFC-134a	CH ₂ FCF ₃	1526
	HFC-23	CHF ₃	14800
	Difluoromethane (HFC-32)	CH ₂ F ₂	771
	Fluoromethane (HFC-41)	CH ₃ F	92
	HFC-43-10mee	CF ₃ CHFCHFCF ₂ CF ₃	1640
	Pentafluoroethane (HFC-125)	C ₂ HF ₅	3500
	HFC-134	C ₂ H ₂ F ₄ (CHF ₂ CHF ₂)	1100
	1,1,1,2-Tetrafluoroethane (HFC-134a)	C ₂ H ₂ F ₄ (CH ₂ FCF ₃)	1430
	HFC-143	C ₂ H ₃ F ₃ (CHF ₂ CH ₂ F)	353
	1,1,1-Trifluoroethane (HFC-143a)	C ₂ H ₃ F ₃ (CF ₃ CH ₃)	4470
	HFC-152	CH ₂ FCH ₂ F	53
	HFC-152a	C ₂ H ₄ F ₂ (CH ₃ CHF ₂)	124
	HFC-161	CH ₃ CH ₂ F	12
	1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)	C ₃ HF ₇	3220
	HFC-236cb	CH ₂ FCF ₂ CF ₃	1340
	HFC-236ea	CHF ₂ CHFCF ₃	1370
	HFC-236fa	C ₃ H ₂ F ₆	9810
	HFC-245ca	C ₃ H ₃ F ₅	693
	HFC-245fa	CHF ₂ CH ₂ CF ₃	1030
	HFC-365mfc	CH ₃ CF ₂ CH ₂ CF ₃	794
5	Perfluorocarbons		
	Carbon tetrafluoride – PFC-14	CF ₄	7380
	Hexafluoroethane – PFC-116	C ₂ F ₆	11100
	Octafluoropropane – PFC-218	C ₃ F ₈	8830
	Perfluorobutane – PFC-3-1-10	C ₄ F ₁₀	8860
	Octafluorocyclobutane – PFC-318	C ₄ F ₈	10300
	Perfluoropentane – PFC-4-1-12	C ₅ F ₁₂	9160
	Perfluorohexane – PFC-5-1-14	C ₆ F ₁₄	9300
	Perfluorodecalin – PFC-9-1-18b	C ₁₀ F ₁₈	7500
	Perfluorocyclopropane	C ₃ F ₆	17340
6	Sulfur hexafluoride	SF ₆	23500
7	Nitrogen trifluoride	NF ₃	16100

Source: IPCC Fourth Assessment Report 2007, IPCC Sixth Assessment Report 2023

Annex C: Minimum requirements Carbonbid

The table below lists all minimum requirements for Carbonbid. These are considered knock-out criteria.

Criterion	Description
Already started/decided	If you have already started implementing your reduction solution and/or it is operational, you may not submit it retroactively. A 'final investment decision' must not have been made prior to submission—meaning no significant resources have been committed, and the implementation decision must not be irreversible.
Emission allowances	The solution must not reduce emissions covered under an emission trading scheme (e.g. EU ETS).
Existing legislation	The solution must not include measures that are already mandatory under existing laws and regulations. X aims to support additional emission reductions only.
Maximum bid price	The maximum allowable bid price is € 300 per tonne of CO ₂ e.
Maximum number of proposals	Each applicant may submit a maximum of two proposals. If more than two are submitted, only the two proposals with the lowest bid price will be considered. In case of a tie, the earliest submission will be prioritized.
Maximum requested amount	The requested funding may not exceed € 700.000.
Minimum reduction volume	A minimum of 100 tonnes of CO ₂ e must be reduced within the implementation period.
Policy-making influence	Applicants must not be entities where a conflict of interest may exist. Parties over which Carbonbid has policy-making influence are excluded from participation.
Port emission area	The reduction must occur within the defined boundaries of the Port Emission Area. (LINK)
Reduction is measurable, demonstrable, and verifiable	The reduction must be expressible in tonnes of CO ₂ e, must be demonstrable, and must be verifiable through an independent accountant's audit.
Reduction takes place before January 1, 2030	The reduction must occur within the implementation period starting from contract signing through January 1, 2030.
Selling/claiming Carbon Credits	Emission reductions may not be sold as carbon credits or used for other compensation schemes. For example, receiving funding for a CO ₂ capture installation while also selling the captured reductions to other companies is not permitted.
Shifting emissions	Emissions may not be shifted outside the Port Emission Area. Example: reducing emissions locally by relocating production abroad is not allowed.
Splitting proposals	A proposal must be executable on its own. If it depends on the approval of another proposal to be implemented, it is not eligible.
Storage without destination	Emissions may not be temporarily stored without a clear, demonstrable market or sustainable destination within the implementation period. For example, storing CO ₂ in tanks without a plan for processing or use is not allowed.

Temporary shutdown / scaling down	Proposals that achieve reductions by temporarily halting or scaling down operations during the implementation period and resuming them afterward are not allowed. Example: a factory shuts down ovens for several months, then resumes normal operation afterward. This is not considered real reduction.
Unfair competitive advantage	You may not gain an unfair competitive advantage in other contracts or services you provide to us by submitting your proposal. Unfair competitive advantage means that a party obtains an unjustified benefit over other participants in a procurement process. An example would be submitting a solution to Carbonbid and using the funds received to submit a lower bid for another contract with us.

Annex D: Market consultation report

To assess the attractiveness of the concept among potential applicants, a market consultation was conducted. During this consultation, participants were asked whether Carbonbid would activate solutions that currently are not being realized, and whether the Carbonbid process (a competitive tender) is appealing enough to join.

In total, eight parties were interviewed. All eight expressed positive views about Carbonbid as a (partial) contribution to their emission reduction ambitions or projects. Half of the participants indicated interest in participating with a contribution per proposal starting at approximately € 250,000. The other half expressed interest starting at around € 1 million. Some participants also expressed critical feedback regarding the size of the budget: it must be sufficient to justify the perceived chance of winning relative to the effort required to participate.