Climate requirements in contracts

Product of NVF working group ”Climate requirements in contracts”

July 2020 to July 2022

Purpose

How to reduce the sector's CO_2 footprint while ensuring optimum competition via tender procedures

Topics discussed

a) How to ensure competition in a market that imposes ambitious climate requirements

b) Experience with EPDs in the transport sector

c) Methods for climate requirements in contracts

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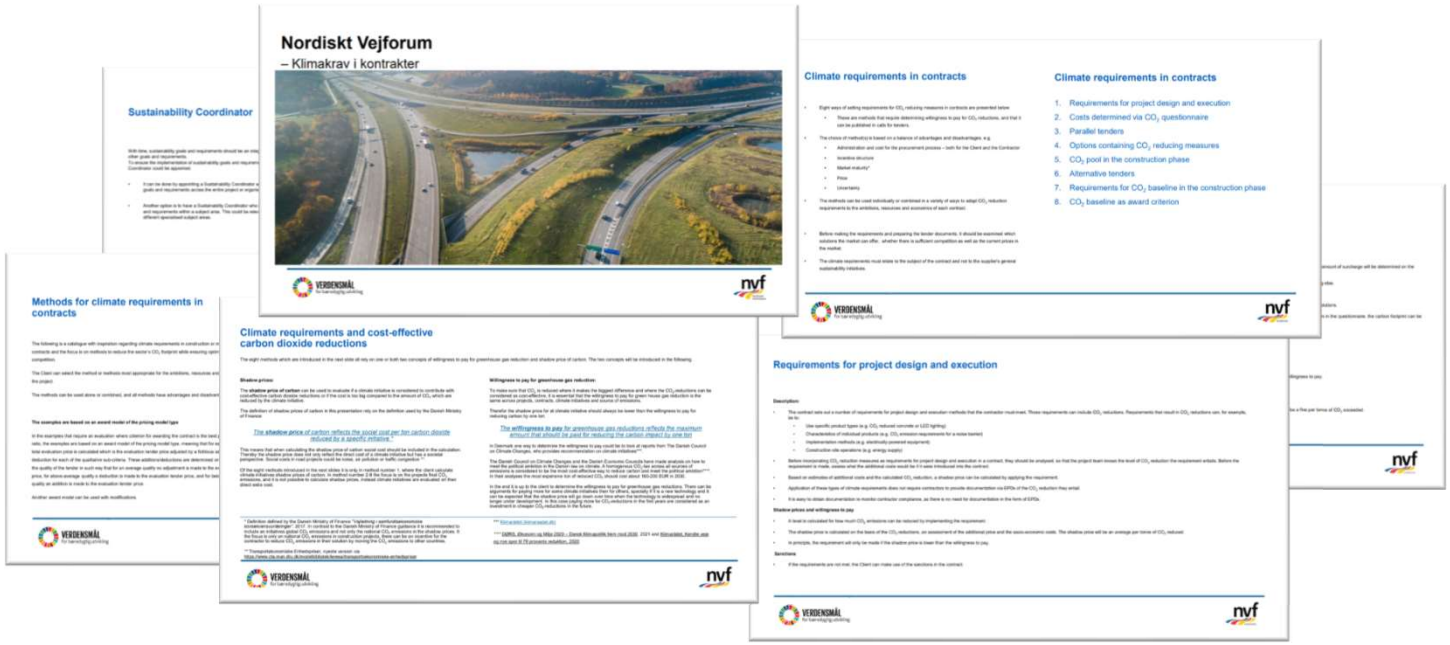
28 members in the working group

The end product

The working group made the report: ”**Klimakrav i kontrakter**”



[Klimakrav i kontrakter – NVF (nvfnorden.org)]

8 Methods for climate requirements

- A catalogue with inspiration regarding climate requirements in construction or maintenance contracts
- The Client can select the method or methods most appropriate for the ambitions, resources and economy in the project
- The methods can be used alone or combined
- All methods have advantages and disadvantages

- The examples are based on an award model of the pricing model type

Cost-effective carbon dioxide reductions

- The shadow price of carbon can be used to evaluate if a climate initiative is considered to contribute with cost-effective carbon dioxide reductions
  - Alternatively, if the costs is too big compared with the CO_2-reductions

*The **shadow price** of carbon reflects the social cost per ton carbon dioxide reduced by a specific initiative**

- Include social costs in the calculation of shadow prices.
- Social costs in road projects could be noise, air pollution or traffic congestion.

- To reduce CO_2 where it makes the biggest difference it is essential that the willingness to pay is the same across projects, contracts, climate initiatives and sources of emissions.

*The **willingness to pay** for greenhouse gas reductions reflects the maximum amount that should be paid for reducing the carbon impact by one ton*

- The shadow price should always be lower than the willingness to pay

Methods

1. Requirements for project design and execution
2. Costs determined via CO_2 questionnaire
3. Parallel tenders
4. Options containing CO_2 reducing measures
5. CO_2 pool in the construction phase
6. Alternative tenders
7. Requirements for CO_2 baseline in the construction phase
8. CO_2 Baseline as award criterion

Methods 1 to 4

1. Requirements for project design and execution

- The contract sets out a number of requirements for project design and execution methods that the contractor must meet.
- Those requirements can include CO_2 reductions such as the use of specific product types or Construction site operations
- A shadow price can be calculated before applying the requirement

2. Costs determined via CO_2 questionnaire

- CO_2 reductions as a competitive parameter for awarding the contract
- The award model describes how a surcharge is added to the tender price per tonne CO_2 emitted by the solution tendered
- The Client has defined and described all the areas in which CO_2 reductions are competed for in a questionnaire
- This could be on different types of materials, transport distances or something else
- The amount of surcharge will be determined on the basis of the Client's willingness to pay

3. Parallel tenders

- The Client tender out several solutions including different project design or different execution methods
- Climate-saving initiatives will only be implemented in the contract if the additional price is below a fixed level
- Based on the calculated CO_2 emissions of each solution, a deduction is calculated for parallel tenders containing CO_2 reducing measures

4. Options containing CO_2 reducing measures

- An option is a prior agreement that the contract can be extended under specified conditions
- Allows the project team to decide whether the measure is to be implemented when the price of the option/measure is available in the tender
- The project team can choose to implement the measure(s) with the lowest shadow price

Methods 5 to 8

5. CO_2 pool in the construction phase

- The project team includes a pool for reducing the carbon footprint of the contract
- Can be activated by the contractor or the Client proposing project modifications or changes to execution methods

6. Alternative tenders

- The Tenderer, at the request of the Client, proposes a solution other than that described in the tender documents
- This method is best suited to open up alternative solutions for the project design
- Evaluation of alternative tenders containing CO2 reducing measures can be handled by using Cost as an award criterion
- The Client must be able to ensure the quality

7. Requirements for CO_2 baseline in the construction phase

- The contract contains an incentive model in the form of a penalty or bonus for deviating from the baseline set by the Client for the carbon footprint of the contract/project
- Ensure incentives to reduce CO2 emissions where it is cost-effective to do so
- The potential for CO2 reduction can be limited to a number of selected elements of the project (e.g. materials, transport, energy, etc.)

8. CO_2 Baseline as award criterion

- The contractor must determine the carbon footprint of the solution tendered in its tender, and this will serve as the baseline for the payment of penalties or bonuses (in Model 7, the Client sets this baseline)
- When awarding the contract, the carbon footprint of the solution will be a sub-criterion, and a surcharge will be added to the evaluation price per tonne of CO_2 emitted in the contractor's tender. The supplement is based on the Client's willingness to pay.

Thank you for your attention