Reports of Cases

OPINION OF ADVOCATE GENERAL
HOGAN
delivered on 3 June 2021 [1]

Case C-126/20

ExxonMobil Production Deutschland GmbH
v
Bundesrepublik Deutschland represented by the Umweltbundesamt (Federal Environmental Office)

(Request for a preliminary ruling from the Verwaltungsgericht Berlin (Administrative Court, Berlin, Germany))

(Reference for a preliminary ruling – Scheme for greenhouse gas emission allowance trading – Transitional arrangement for the harmonised free allocation of emission allowances – Commission Decision 2011/278/EU – Article 3(h) – Process emissions sub-installation – Sulphur recovery – 'Claus process' – Emission of CO_2 contained in natural gas – Scope of the concept 'process emission sub-installation' – Use of raw materials containing carbon – Hierarchy between the different categories of sub-installations – Allocation request not awarded at the end of a trading period – Shift to next trading period)

I. Introduction

1. This request for a preliminary ruling from the Verwaltungsgericht Berlin (Administrative Court, Berlin, Germany) principally concerns the scope of what is described as a 'process emissions sub-installation' in accordance with Article 3(h)(v) of Commission Decision 2011/278/EU. [2] This is one of the categories by virtue of which an installation might be allocated emission allowances free of charge for the purposes of Directive 2003/87/EC, [3] which establishes a scheme for greenhouse gas emission allowances for firms trading within the European Union.

2. While this question is, admittedly, a highly technical one – specifically, whether the emission of carbon dioxide (CO_2) which is naturally released in the course of an industrial process known as the 'Claus process' have to be granted emissions allowances free of charge – it is nonetheless one with considerable economic importance. This is exemplified by the fact that ExxonMobil

[1] Original language: English.

[2] Commission Decision of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ 2011 L 130, p. 1).

[3] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ 2003 L 275, p. 32), as amended by Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community (OJ 2009 L 140, p. 63).

Production Deutschland GmbH's ('ExxonMobil') claim amounts to about 3.5 million certificates with a market value of about EUR 78.5 million for the period of 2013 to 2019.[4] Before examining the facts and the legal issues which arise, it is, however, first necessary to set forth the relevant legal provisions.

II. Legal framework

A. EU law

1. Directive 2003/87

3. Directive 2003/87 defines its scope in Article 2(1) which reads:

'This Directive shall apply to emissions from the activities listed in Annex I and greenhouse gases listed in Annex II.'

4. Relevant definitions are contained in its Article 3:

'(b) "emissions" means the release of greenhouse gases into the atmosphere from sources in an installation;

…

(e) "installation" means a stationary technical unit where one or more activities listed in Annex I are carried out and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;'

5. Chapter III of Directive 2003/87 deals with the rules regarding stationary installations. Article 10 thereof states the principle that from 2013 onwards, Member States shall auction all allowances which are not allocated free of charge in accordance with Articles 10a and 10c.

6. Article 10a is headed 'Transitional Community-wide rules for harmonised free allocation'. In the first subparagraph of its first paragraph it provides that the Commission shall adopt Community-wide and fully harmonised implementing measures for the allocation of free allowances.

7. Whereas Article 10a(11) of Directive 2003/87 provides that the amount of allowances allocated free of charge shall decrease each year with the view to reaching no free allocations in 2027, paragraph 12 of that provision specifies that sectors or subsectors which are exposed to a significant risk of carbon leakage shall not be subject to such a decrease.

8. Article 10a(13) to (18) of Directive 2003/87 provided for rules on how to determine which sectors or subsectors are considered to be exposed to a significant risk of carbon leakage.

[4] Figures provided by the Umweltbundesamt (Federal Environmental Office, Germany) during the hearing.

9. Article 12 of Directive 2003/87 headed 'Transfer, surrender and cancellation of allowances provides in its paragraph 3:

'Member States shall ensure that, by 30 April each year, the operator of each installation surrenders a number of allowances, … equal to the total emissions from that installation during the preceding calendar year … and that these are subsequently cancelled.'

10. Article 13, dealing with the validity of allowances, provides:

'1. Allowances issued from 1 January 2013 onwards shall be valid for emissions during periods of eight years beginning on 1 January 2013.

2. Four months after the beginning of each period referred to in paragraph 1, allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12 shall be cancelled by the competent authority.

…'

11. The wording of Article 13 was replaced by Directive 2018/410.[5] It now provides as follows:

'Allowances issued from 1 January 2013 onwards shall be valid indefinitely. Allowances issued from 1 January 2021 onwards shall include an indication showing in which ten-year period beginning from 1 January 2021 they were issued, and be valid for emissions from the first year of that period onwards.'

2. Decision 2011/278

12. Recital 12 of Decision 2011/278 provides as follows:

'Where deriving a product benchmark was not feasible, but greenhouse gases eligible for the free allocation of emission allowances occur, those allowances should be allocated on the basis of generic fallback approaches. A hierarchy of three fallback approaches has been developed in order to maximise greenhouse gas emission reductions and energy savings for at least parts of the production processes concerned. The heat benchmark is applicable for heat consumption processes where a measurable heat carrier is used. The fuel benchmark is applicable where non-measurable heat is consumed. The heat and fuel benchmark values have been derived based upon the principles of transparency and simplicity, using the reference efficiency of a widely available fuel that can be regarded as second-best in terms of greenhouse gas efficiency, considering energy efficient techniques. For process emissions, emission allowances should be allocated on the basis of historical emissions. …'

[5] Directive (EU) of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low carbon investments, and Decision (EU) 2015/1814 (OJ 2018 L 76, p. 3).

13. Article 3(h)(iv) and (v) of Decision 2011/278 defines process emission sub-installations as follows:

(h) '"process emissions sub-installation" means greenhouse gas emissions listed in Annex I to [Directive 2003/87] other than carbon dioxide, which occur outside the system boundaries of a product benchmark listed in Annex I, or carbon dioxide emissions, which occur outside the system boundaries of a product benchmark listed in Annex I, as a result of any of the following activities and emissions stemming from the combustion of incompletely oxidised carbon produced as a result of the following activities for the purpose of the production of measurable heat, non-measurable heat or electricity provided that emissions that would have occurred from the combustion of an amount of natural gas, equivalent to the technically usable energy content of the combusted incompletely oxidised carbon, are subtracted:

…

(iv) chemical syntheses where the carbon bearing material participates in the reaction, for a primary purpose other than the generation of heat;

(v) the use of carbon containing additives or raw materials for a primary purpose other than the generation of heat;

…'

14. Article 6 of Decision 2011/278 describes the system of sub-installations. The parts relevant in the present context provide:

'1. For the purposes of this Decision, Member States shall divide each installation eligible for the free allocation of emission allowances under Article 10a of [Directive 2003/87] into one or more of the following sub-installations, as required:

(a) a product benchmark sub-installation;

(b) a heat benchmark sub-installation;

(c) a fuel benchmark sub-installation;

(d) a process emissions sub-installation.

Sub-installations shall correspond, to the extent possible, to physical parts of the installation.

For heat benchmark sub-installations, fuel benchmark sub-installations and process emissions sub-installations, Member States shall clearly distinguish … between whether or not the relevant process serves a sector or subsector deemed to be exposed to a significant risk of carbon leakage as determined by Decision 2010/2/EU.

…

2. The sum of the inputs, outputs and emissions of each sub-installation shall not exceed the inputs, outputs and total emissions of the installation.'

15. Article 7(7) and 8(5) of Decision 2011/278 provide that the Member States must ensure that there are no overlaps between sub-installations and that there is no double-counting.

3. Regulation No 601/2012

16. As envisaged in Article 14(1) of Directive 2003/87, Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council[6] provides for such rules.

17. Article 3 of Regulation No 601/2012 contains certain definitions that are missing in either Directive 2003/87 or Decision 2011/278, as for example:

'(30) "process emissions" means greenhouse gas emissions other than combustion emissions occurring as a result of intentional and unintentional reactions between substances or their transformation, including the chemical or electrolytic reduction of metal ores, the thermal decomposition of substances, and the formation of substances for use as product or feedstock;

…

(40) "inherent CO_2" means CO_2 which is part of a fuel;

…'

18. Article 2 of Regulation No 601/2012 provides:

'This Regulation shall apply to the monitoring and reporting of greenhouse gas emissions specified in relation to the activities listed in Annex I to Directive [2003/87]'.

19. Article 48 of Regulation No 601/2012 dealing with inherent CO_2 provides as follows:

'1. Inherent CO_2 which is transferred into an installation, including that contained in natural gas or a waste gas including blast furnace gas or coke oven gas, shall be included in the emission factor for that fuel.

…

However, where inherent CO_2 is emitted, or transferred out of the installation to entities not covered by that Directive, it shall be counted as emissions of the installation where it originates.

…'

[6] OJ 2012 L 181, p. 30.

4. Decision 2015/1814

20. A market stability reserve was established by Decision 2015/1814[7] in order to deal with structural supply demand imbalances. Article 1(2), (3) and (5) of Decision 2015/1814 determines which allowances shall be placed in that market reserve. It provides:

'2. The quantity of 900 million allowances deducted from auctioning volumes during the period 2014-2016, as determined in Regulation (EU) No 176/2014 pursuant to Article 10(4) of [Directive 2003/87], shall not be added to the volumes to be auctioned in 2019 and 2020 but shall instead be placed in the reserve.

3. Allowances not allocated to installations pursuant to [provision dealing with a new entrants reserve] and allowances not allocated to installations because of the application of [provisions dealing with the cessation of operations] shall be placed in the reserve in 2020. …

…

5. Each year, a number of allowances equal to 12% of the total number of allowances in circulation, … shall be deducted from the volume of allowances to be auctioned by the Member States under Article 10(2) of [Directive 2003/87] and shall be placed in the reserve over a period of 12 months beginning on 1 September of that year, unless the number of allowances to be placed in the reserve would be less than 100 million. …'

B. German law

1. Treibhausgas-Emissionshandelsgesetz (TEHG)

21. The wording of Paragraph 7 subparagraph 2 of the Treibhausgas-Emissionshandelsgesetz (Law on greenhouse gas emissions trading, 'TEHG')[8] in its version valid in 2011 corresponded to the wording of Article 13 of Directive 2003/87.[9]

22. Paragraph 9 subparagraph 1 of the TEHG provides:

'(1) Installation operators shall receive an allocation of free emission allowances in accordance with the principles laid down in Article 10a … of Directive [2003/87] … and with those laid down in Decision [2011/278] …'

23. Part 2 of Annex I to the TEHG, entitled 'Activities', lists, in point 1, among the installations whose emissions fall within the scope of that law, 'combustion units intended to burn fuel with a total rated thermal input equal to or exceeding 20 [megawatts (MW)] in an installation …'.

[7] Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ 2015 L 264, p. 1).

[8] Gesetz über den Handel mit Berechtigungen zur Emission von Treibhausgasen of 21 July 2011 (BGBl. 2011 I, p. 1475).

[9] Paragraph 7 sub-paragraph 2 of the TEHG was not cited by the referring court. It was mentioned in ExxonMobil's written submissions though, as having been the basis for the Bundesverwaltungsgericht's (Federal administrative court, Germany) ruling in its judgment of 26 April 2018 (DE:BVerwG:2018:260418U7C20.16.0). The wording of that provision was amended by Article 1 of the Gesetz zur Anpassung der Rechtsgrundlagen für die Fortentwicklung des Europäischen Emissionshandels of 18 January 2019 (BGBl I S.37) with effect from 25 January 2019.

C. Zuteilungsverordnung 2020

24. Paragraph 2, point 29(b)(ee) of the Zuteilungsverordnung über Treibhausgas-Emissionsberechtigungen 2020 [10] (Regulation on the allocation of greenhouse gas emission allowances in the 2013 to 2020 trading period; 'the ZuV 2020') contains a definition of a process emission sub-installation that corresponds to that contained in Article 3(h)(v) of Decision 2011/78.

25. Paragraph 3 of the ZuV 2020 headed 'Formation of allocation elements' provides in its first subparagraph:

'In the application for free allocation of allowances for an installation, all the inputs, outputs and related emissions relevant for the allocation shall be allocated to the following allocation elements in the reference period determined …

(1) one or more allocation elements with product emission value in accordance with [a product allocation element],

(2) an allocation element with a heat emission value …, in so far as it does not include allocation elements pursuant to point 1,

(3) an allocation element with fuel emission value …, in so far as it does not include allocation elements pursuant to points 1 and 2, and

(4) an allocation element with process emissions in accordance with Paragraph 2, point 29, in so far as it does not include allocation elements pursuant to points 1 to 3.'

III. The dispute in the main proceedings, the questions referred and the procedure before the Court

26. ExxonMobil operates a natural gas processing installation for the recovery of sulphur in Großenkneten (Germany) ('the installation'). Because this activity involves the combustion of fuels with a total rated thermal input exceeding 20 MW, the installation falls within the ambit of the TEHG, [11] which transposes Directive 2003/87 [12] into national law.

27. That installation consists, in particular, of a sulphur recovery facility (comprising Claus process facilities, a steam super heater, a steam boiler and a gas engine facility), natural gas desulphurisation (purification) and natural gas dehydration facilities, waste gas purification facilities and emergency flaring facilities. The Claus process facilities are the main source of the CO_2 emissions.

28. The installation processes natural gas recovered from natural sources which consists of a high concentration of hydrogen sulphide (H_2S) as well as of water vapour (H_2O), methane (CH_4) and CO_2. Due to the high level of H_2S present in the natural gas, this is also called 'sour gas'. The CO_2, like the other components, is naturally present in the raw gas occurring in the subsoil. Its

[10] Verordnung über die Zuteilung von Treibhausgas-Emissionsberechtigungen in der Handelsperiode 2013 bis 2020 vom 26. September 2011 (BGBl. I S. 1921).

[11] Paragraph 2 in conjunction with Annex 1 part 2 TEHG.

[12] The relevant provision of that directive is Article 2(1), read in conjunction with Annex I.

amount can vary depending on the borehole and deposit but is, according to ExxonMobil,[13] present in all European natural gas deposits. In order for the gas to correspond to the quality prescribed by the network operator, CO_2 and other natural components have to be partially removed from the natural gas prior to its delivery to the transmission network.

29. Before proceeding further, it is necessary briefly to describe the Claus process which is at the heart of these proceedings. This is a multi-step gas desulphurising process named after its German inventor and it has been the industry standard ever since the grant of a British patent for this purpose in 1883. As a result of the application of this chemical process, sulphur is recovered from the gaseous hydrogen sulphide found in raw natural gas. Critically, however, CO_2 is released as a natural by-product of the chemical process without itself being involved in the series of chemical reactions which themselves produce the sulphur.

30. In the Großenkneten natural gas processing plant, sour gas is purified by chemical absorption with a solvent (sulfinol process). The solvent is regenerated and the H_2S released is converted into pure liquid sulphur in Claus plants. The CO_2 removed from the sour gas, which is inherently present therein, is then discharged into the atmosphere via a chimney. The CO_2 does not take part in the Claus chemical reaction leading to the recovery of the elemental sulphur.[14] The heat produced during the thermal step is captured in a waste heat boiler and used in the installation.

31. ExxonMobil made a request for free of charge emission allowances in respect of the installation. This request was based on different apportionments of the various benchmarks. By its decision of 17 February 2014 the Deutsche Emissionshandelsstelle (German Emission Allowance Trading Authority; 'the DEHSt') allocated to ExxonMobil free of charge 4 216 048 emission allowances for the trading period running from 2013 until 2020. This allocation was based, in part, on the application of the heat benchmark[15] and, in part, on the application of the fuel benchmark, with the risk of carbon leakage being taken into account. The DEHSt refused, however, to allocate to ExxonMobil free emission allowances which the latter had applied for in respect of process emissions. It justified this refusal on the basis that the CO_2 emissions did not result from the Claus process but rather that the CO_2 was already contained in the raw material used for the process. It is this particular refusal which gives rise to the present proceedings.

32. The objections that had been lodged by ExxonMobil in respect of that decision were dismissed by the DEHSt's decision of 7 October 2019.[16] In this decision the DEHSt reiterated that an allocation applying the process benchmark according to the second alternative of Paragraph 2, point 29(b)(ee) of the ZuV 2020 could not be granted because the CO_2 is merely an associated gas which was released as an incidental by-product of the process rather than one participating in the Claus chemical reaction itself. It followed therefore that the CO_2 which is emitted through a chimney into the atmosphere at the end of the Claus process did not qualify for an allocation of emission certificates free of charge.

[13] This was not contested by any of the other parties.

[14] Although ExxonMobil points out in its response that it fulfils an important operational task in the Claus process as a non-inflammable gas with a temperature regulation function for the technically necessary control of the operating temperature. This was, however, contested by the Umweltbundesamt (Federal Environmental Office, Germany).

[15] For the use of the heat captured in the waste heat boiler that is used in the installation.

[16] The lapse of time between ExxonMobil's objection lodged on 12 March 2014 and its dismissal by the DEHSt is due to the stay in proceedings pending the Court's judgment in the Case *ExxonMobil Production Deutschland* (C-682/17, EU:C:2019:518; ' Case C-682/17') which was handed down on 20 June 2019. The case concerned a different natural gas processing installation using the Claus process, also operated by ExxonMobil.

33. ExxonMobil is pursuing its claim by an action brought on 8 November 2019 before the Verwaltungsgericht Berlin (Administrative Court, Berlin, Germany, 'the referring court').

34. The applicants in Case C-682/17 and in the present case are identical. The installation at issue in the present case is not, however, an electricity generator within the meaning of Article 3(u) of Directive 2003/87.[17] Furthermore, according to the referring court, the electricity generated by ExxonMobil in its Großenkneten plant is generated by means of high efficiency cogeneration and would therefore not be generally excluded from the free allocation of emission certificates (Article 10a(4) of Directive 2003/87). As this had not been true of the installation at issue in Case C-682/17, the Court had – already on that ground – decided that ExxonMobil was not entitled to the free allocation of allowances for that plant. This series of findings rendered an answer to the following questions superfluous. Questions 3 with sub-questions (a) and (b) and 4 of Case C-682/17 have now been asked once again by the referring court in questions 1 to 4 of the present case.

35. In the light of the above considerations, the referring court has decided to stay the proceedings and to refer the following questions to the Court of Justice for a preliminary ruling:

'(1) Does the CO_2 released into the atmosphere as part of the processing of natural gas (in the form of sour gas) in the "Claus process", by means of the CO_2 inherent in natural gas being separated from the gas mixture, constitute an emission which, for the purposes of the first sentence of Article 3(h) of [Decision 2011/278], occurs as a result of the process referred to in Article 3(h)(v)?

(2) For the purposes of the first sentence of Article 3(h) of [Decision 2011/278], can CO_2 emissions occur "as a result of" a process in which the CO_2 inherent in the raw material is released into the atmosphere, even though the process taking place does not give rise to additional CO_2, or does that provision make it mandatory for the CO_2 released into the atmosphere to occur for the first time as a result of that process?

(3) Is a carbon-containing raw material "used" within the meaning of Article 3(h)(v) of [Decision 2011/278] where, in the "Claus process", the naturally occurring natural gas is used to produce sulphur and, in the course of that procedure, the CO_2 inherent in the natural gas is released into the atmosphere, even though the CO_2 inherent in the natural gas does not play a part in the chemical reaction taking place in that process, or does the term "use" make it mandatory for the carbon to play a part in, or indeed be essential to, the chemical reaction taking place?

(4) If Questions 1 to 3 are answered in the affirmative:

On the basis of which benchmark is the allocation of free emission allowances to be carried out where an installation subject to the emission trading scheme satisfies both the defining conditions of a heat benchmark sub-installation and the defining conditions of a process emissions sub-installation? Does entitlement to an allocation on the basis of the heat benchmark take priority over entitlement to an allocation for process emissions or does entitlement to an allocation for process emissions take precedence over the heat benchmark and the fuel benchmark because it is more specific to the case in question?

[17] According to the referring court, ExxonMobil only started to generate electric energy for sale to third parties in the summer of 2014 which was after the DEHSt had issued its decision.

(5) If Questions 1 to 4 are answered in the affirmative:

Can entitlements to a further free allocation of emission allowances for the third trading period be met after the end of the third trading period with allowances of the fourth trading period where the existence of the allowance entitlement is established by a court only after expiry of the third trading period, or do allowance entitlements that have not yet been met lapse on expiry of the third trading period?'

36. ExxonMobil, the Umweltbundesamt (Federal Environmental Office, Germany)[18] – in response to written questions by the Court – the German Government[19] and the Commission lodged written observations before the Court and were represented at the hearing on 24 February 2021.

IV. Assessment

37. By its first to third questions the referring court asks in essence whether the release of CO_2 into the atmosphere which is inherent in the raw material used for the manufacture of a product and which occurs outside the system boundaries of a product benchmark can be regarded as a 'process emissions sub-installation' as per Article 3(h)(v) of Decision 2011/278 when the CO_2 in question does not form part of the chemical reaction whereby that product is manufactured. As all three questions focus on different aspects of the wording of Article 3(h)(v) of Decision 2011/278 it is convenient to deal with them together.

A. Preliminary Observations: application of the emission allowance trading scheme to the sulphur recovery process

38. These questions presuppose, however, that emissions of CO_2 that are inherent in the natural gas are in fact covered by the emission allowance trading scheme. At first glance, it seems surprising to be dealing with this question at all as the Court already found in its judgment in Case C-682/17 which also dealt with a Claus process installation 'that an installation such as that at issue in the main proceedings falls within the scope of Directive 2003/87 and, therefore, of the emission allowance trading scheme established by it, without it mattering whether or not the CO_2 from that installation's activity is present naturally in the raw material processed by it'.[20]

39. This judgment notwithstanding, the German Government as well as the Commission argue that the emission allowance trading scheme only applies to the greenhouse gas emissions caused by the combustion – which are not at issue here – and not to those resulting from the CO_2 which is inherent in the natural gas and which is emitted as a natural by-product at the end of the sulphur recovery process without itself having been involved in the combustion process. They argue that those two activities should be dealt with separately.[21]

[18] The Federal Republic of Germany is a party to the proceedings before the referring court because the decision that is being challenged has been taken by the DEHSt which is placed in the Federal Environmental Office. The Federal Environmental Office represents the Federal Republic of Germany in its role as a party in the main proceedings. It is the central environmental agency of the Federal Republic of Germany.

[19] Acting as a Member State and represented by its Bundesministerium für Wirtschaft und Energie (Federal Ministry for Economic Affairs and Energy).

[20] Paragraph 58.

[21] It is nevertheless somewhat surprising that, although contending for this, they do not appear to engage in their argument with the Court's judgment in Case C-682/17.

40. In light of the above, I would like to retrace the Court's reasoning in Case C-682/17 without necessarily discussing the same arguments once again. This seems appropriate given that the parties seem to agree that the installations in both cases are comparable.

41. In Case C-682/17 the Court considered the requirements of Article 2(1) of Directive 2003/87. It is this provision which defines the scope of that directive and thus by extension the applicability of the greenhouse gas emission allowance trading scheme. The directive applies by virtue of that provision to emissions of greenhouse gases listed in Annex II to that directive – CO_2 is one of the emissions listed – if those emissions stem 'from the activities listed in Annex I'. One of those activities is the 'combustion of fuels in installations with a total rated thermal input exceeding 20 MW …'.[22]

42. The Court then found, at paragraphs 47 to 53 of that judgment, that the wording of Article 2(1) and Article 3(b) of Directive 2003/87 – the latter defines the term 'emissions' – did not require that the greenhouse gas emitted *must itself be produced in the course of the activities listed in Annex I*. The Court found support for this opinion in Article 48(1) of Regulation No 601/2012 concerned with the monitoring and reporting of emissions pursuant to Directive 2003/87. It provides that inherent CO_2, as defined in Article 3(40) of that regulation, must, when it is contained in natural gas, be included in the emission factor for that fuel. The Court also relied on the objective of Directive 2003/87, namely promoting the reductions of greenhouse gas emissions in a cost-effective and economically efficient manner.[23]

43. The result of that reasoning is that operators of Claus process facilities like the one at issue here have to surrender a number of emission allowances that, according to Article 12(3) of Directive 2003/87, *must be equal to the total emissions from that installation*. The term 'installation' is defined in Article 3(e) of Directive 2003/87 as a 'stationary technical unit where one or more activities listed in Annex I are carried out and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution'. This definition opens the possibility to the inclusion of a separate unit if activities that are carried out there are associated with and have a technical connection to the installation concerned.[24] On the other hand, the argument by the German Government and the Commission if one installation carries out several activities – as in the present case, the combustion of fuels with a rated thermal input exceeding 20 MW which is listed in Annex I as well as the recovery of sulphur which is not listed in Annex I – the activity that is not listed in Annex I is not subject to the emission allowance trading scheme,[25] is not covered by that wording.

44. In *Trinseo Deutschland*,[26] a case where the applicant's installation did not cause emissions listed in Annex II to Directive 2003/87 itself, although its activity was listed in Annex I to that directive – and thus, in some ways, constitutes the reverse of the present case – the Commission had argued that 'indirect emissions' from the production of heat should be considered for the purposes of the application of the emission allowance trading scheme, thus, arguing in favour of

[22] The exceptions for installations for the incineration of hazardous or municipal waste are not at issue here.

[23] Ibid. paragraphs 54 and 56.

[24] See judgment of 9 June 2016, *Elektriciteits Produktiemaatschappij Zuid-Nederland EPZ* (C-158/15, EU:C:2016:422, paragraph 29).

[25] Different in this respect to the Opinion of Advocate General Saugmandsgaard Øe in *ExxonMobil Production Deutschland* (C-682/17, EU:C:2019:167, point 74).

[26] Judgment of 28 February 2018 (C 577/16, EU:C:2018:127).

an interpretation of emissions detached from the installation. The Court nevertheless adhered to the wording of Article 3(b) of Directive 2003/87 that links the emissions to the installation. For my part, I see no reason to deviate from that clear wording.

45. In so far as Article 6 of Decision 2011/278 divides installations into sub-installations, this is merely an analytical exercise for the purpose of applying benchmarks. The provision states clearly that this is only done for the purposes of Decision 2011/278. The language of the provision which specifies that *installations* shall be divided into *sub-installations* also makes it clear that that division does not in any way affect the notion of 'installation' as defined in Article 3(e) of Directive 2003/87.

46. In the light of those considerations, I take the view that, in line with the findings of the Court in Case C-682/17, the emission allowance trading scheme does not only apply to the CO_2 emissions resulting from the combustion process, but it also applies to those from the sulphur recovery process taking place in the same installation.

47. In so far as the Commission argues that the inclusion of activities in the scheme that have not been included in Annex I would be contrary to the decision of the EU legislature only to include activities in the scheme that have a particular potential for the cost effective reduction of greenhouse gases,[27] the Court has already pointed out in Case C-682/17 that 'even though CO_2 is present in the composition of the sour gas, the activity of combustion of fuels carried out by an installation such as the installation at issue in the main proceedings, for the purpose of natural gas desulphurisation and sulphur recovery under the Claus process, has some potential to reduce CO_2 emissions since the CO_2 content of the sour gas is liable to vary according to the deposit. Contrary to ExxonMobil's submissions, it is irrelevant in that regard that the CO_2 content is not systematically foreseeable'.[28]

B. Questions 1 to 3: Does the CO_2 released into the atmosphere as part of the conditioning of sour gas in the Claus process qualify as a 'process emission' for the purposes of Article 3(h)(v) of Decision 2011/278?

48. While the German Government represented by the Federal Ministry for Economic Affairs and Energy and the Commission do not agree with the Federal Environmental Office on whether the CO_2 released into the atmosphere as part of the sulphur recovery process is covered by the emission allowance trading scheme, those three parties agree that no free allowances should be awarded for those emissions. It should, however, be kept in mind that any argument of the German Government and the Commission to the effect that those emissions cannot be considered as process emissions covered by Article 3(h)(v) of Decision 2011/278 is made against the background that, according to their submissions, ExxonMobil is not obliged to surrender any allowances in respect of those emissions.

[27] The Commission relies in its argument on the Court's judgment of 17 May 2018, *Evonik Degussa* (C-229/17, EU:C:2018:323, paragraph 42). In that judgment, the Court, however, only requires 'some potential to reduce greenhouse gas emissions', not a *particular potential* for a cost-efficient reduction of greenhouse gases.

[28] Paragraph 57. See also Opinion of Advocate General Kokott in *Elektriciteits Produktiemaatschappij Zuid-Nederland EPZ* (C-158/15, EU:C:2016:139, point 39) who pointed out that 'included in the market mechanism is a measure whereby certain activities will in some circumstances cease completely if they are no longer competitive due to the cost of their unavoidable emissions', a rationale which might apply to certain deposits in the present case, if the natural content of CO_2 is particularly high.

49. The first three questions of the referring court deal with different elements of Article 3(h)(v) of Decision 2011/278 defining a 'process emissions sub-installation'.[29] In order for this provision to apply, the following constituent elements have to be fulfilled: there must be (i) CO_2 emissions, which (ii) occur outside the system boundaries of a product benchmark listed in Annex I and, finally, (iii) as a result of the 'use of carbon containing … raw materials for a primary purpose other than the generation of heat'. There is agreement between the parties that the first two of these requirements are fulfilled. Emission of (the inherent) CO_2 takes place as a natural by-product at the end of the sulphur recovery process, a process for which there is no product benchmark.[30] There is accordingly disagreement about the third requirement.

50. The referring court looks at three aspects of that third criterion: first, whether the emission of CO_2 which is inherent can be considered 'a result' of any further process and second whether such inherent CO_2 can be considered to be 'used' in a process if it does not take part in the chemical reaction. A third question that is being discussed is whether we are dealing with a 'carbon containing raw material'. Proponents of a negative answer to that third question appear to argue that the raw material 'used' in the process is not the sour gas but rather the hydrogen sulphide which does not contain any CO_2. There is agreement, however, that the primary purpose of the sulphur recovery process is not the generation of heat.

51. According to the Court's established case-law, the interpretation of a provision of EU law requires that, in addition to the wording of the relevant provision – which, 'having reference to the conventional principles of interpretation, is invariably the starting point and at the same time the limit of any interpretation'[31] – consideration must also be given to its context and the objectives pursued by the rules of which it forms part.[32]

1. Literal interpretation

52. Starting with the wording of Article 3(h)(v) of Decision 2011/278: CO_2 emissions must be the result of the use of carbon containing additives or raw materials for a primary purpose other than the generation of heat. Given that *carbon dioxide emissions* must be the result of the process, rather than the production of *carbon dioxide*, it appears to me to be well within the wording of this provision if inherent CO_2 is emitted at the end of a process like the Claus process, even though it is not being actually used as part of a chemical reaction in the course of that process.[33] A far more difficult question is whether those CO_2 emissions can be said to be the result of *the use of a carbon containing additive or raw material*.

53. Again, I have little doubt with respect to the term 'raw material'. According to the Cambridge dictionary[34] 'raw material' is 'any material, such as oil, cotton, or sugar in its natural condition, before it has been processed for use'. It is true, of course, that only the hydrogen sulphide is actually being processed in the Claus process whereas the CO_2 contained in the sour gas only passes through the Claus process plant without taking part in the process. Looking at the simple word sense, though, the term 'raw material' does not seem to me to be limited to parts of a material that are being actively processed. It might be correct, as the Federal Environmental Office

[29] On the other hand, Decision 2011/278 does not define a 'process emission' as such. I will return to this later.

[30] The CO_2 emissions resulting from the combustion are subject to allocations under the heat benchmark according to Article 3(c) of Decision 2011/278.

[31] See to that effect the Opinion of Advocate General Trstenjak in *Agrana Zucker* (C-33/08, EU:C:2009:99, point 37).

[32] See to that effect, for example, Case C-628/17, paragraph 71 and the case-law cited.

[33] See also judgment of 28 February 2018, *Trinseo Deutschland* (C-577/16, EU:C:2018:127, paragraphs 45 to 48).

[34] Consulted online.

suggested, that if the CO_2 were separated from the sour gas prior to it being processed in the Claus facility the CO_2 would not be a raw material, because it is not being further processed whereas the remainder of the gas would be.[35] If, however, that prior step does not take place, it does not mean that a material with a CO_2 content that enters an installation for processing is not a raw material, simply because only part of it is being processed.

54. The question regarding the causality, namely, whether it can be considered that the CO_2 emissions are the result of the *use* of that raw material is, however, less clear. Here, the literal interpretation rather points to saying that this does not come within the wording of Article 3(h)(v) of Decision 2011/278. Again, looking at the Cambridge dictionary,[36] the definition to be found there that describes the use of the word in the present case most closely is 'the act of using something, or a period of time when something is being used' with the verb 'use' meaning 'to put something such as a tool, skill, or building to a particular purpose'.[37] This putting to a particular purpose, to my mind, implies that something is being done with that part of the raw material – namely the carbon content – that is specifically being referred to.

55. There is agreement between the parties that the CO_2 does not participate in the chemical reaction during the Claus process. However, ExxonMobil argues that it puts the inherent CO_2 to some use. According to ExxonMobil, the CO_2 fulfils a procedural role in the Claus process as a non-combustible gas with a temperature-regulating function for the technically necessary control of the combustion temperature in the Claus process for the production of sulphur. This does not seem to be contested by the Federal Environmental Office. As was pointed out, however, by its representative during the oral hearing, this is not a necessary role because there are other ways of achieving the same result.[38] This in turn raises the further question whether it is sufficient to make some use of the CO_2 in order for the process to qualify as a process emission sub-installation, or whether its use must be necessary for the process.[39]

56. It was also argued that, as Article 3(h)(iv) of Decision 2011/278 specifically refers to a 'chemical syntheses where the carbon bearing material participates in the reaction' whereas Article 3(h)(v) of that decision does not, such a participation in a chemical reaction cannot be a requirement under the latter provision.

57. Pausing at this point, and although I consider that so far as the critical word 'use' as it appears in Article 3(h)(v) of Decision 2011/278 is concerned, the wording points to an interpretation according to which the CO_2 has to play an active and necessary role in the process, it may be appropriate – in accordance with consistent case-law – to have regard to the general scheme of Directive 2003/87 and of Decision 2011/278 and to the objectives they pursue as an aid to this process of interpretation.[40]

35 This would not impede the Claus process from taking place as the CO_2 fulfils no function in it (which is discussed further below).

36 Consulted online.

37 Other language versions of Article 3(h)(v) of Decision 2011/278, such as the Dutch, the French, the German, the Italian, the Portuguese, the Swedish and the Spanish versions do not lead to a different assessment.

38 The representative of the Federal Environmental Office pointed out that the CO_2 could be separated prior to the gas being treated in the Claus process without this having any influence on the outcome and that, indeed, the Claus process equipment would have to be adjusted to the specific CO_2 content of the natural gas used. This has not been contested by ExxonMobil. Ultimately, it falls to the referring court to find whether the CO_2 plays a necessary role in the process.

39 The question whether it is necessary is for the national court to decide.

40 Judgment of 3 December 2020, *Ingredion Germany* (C-320/19, EU:C:2020:983, paragraph 50 and the case-law cited).

2. Contextual and teleological interpretation

58. According to the Court's settled case-law, Directive 2003/87, and thereby also Decision 2011/278 which is implementing it, is intended to establish a scheme for greenhouse gas emission allowance trading which seeks to reduce those emissions into the atmosphere to a level that prevents dangerous anthropogenic interference with the climate and the ultimate objective of which is to protect the environment.[41] The economic logic underlying that scheme is that it encourages the participants to emit quantities of greenhouse gases that are less than the allowances originally allocated to them, in order to sell the surplus to other participants.[42] In order to achieve that aim, Article 10a of Directive 2003/87 provides, with regard to installations in certain sectors of activity, for the free allocation of emission allowances, the quantity of which, in accordance with paragraph 11 of that provision, is to decrease gradually over the period 2013 to 2020, in order to arrive at the complete abolition of free allowances in 2027.[43]

59. This means that the rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87 for which Decision 2011/278 determines the rules are exceptional (and, indeed, temporary) in nature. Furthermore, Article 3(c), (d) and (h) of Decision 2011/278[44] define the so-called 'fallback benchmarks' which only come into play if 'corresponding emissions [are] not covered by a product benchmark sub-installation'[45]/'occur outside the system boundaries of a product benchmark'.[46] The Court already found in its judgment in *INEOS* that it followed that Article 3(h)(iv) of Decision 2011/278 cannot be interpreted broadly.[47] The same must be true for all activities listed in Article 3(h) of Decision 2011/78.

60. As a result of this, I cannot agree that the fact that Article 3(h)(iv) of Decision 2011/278 specifically refers to the participation of a carbon bearing material in chemical syntheses whereas Article 3(h)(v) of that decision does not, means that the word 'use' contained in the latter provision must be given an interpretation that is so broad that it is no longer covered by the word 'use' simply in order to distinguish it from the cases covered by the former provision. The term 'use' is in fact broader and might encompass a 'use' that does not consist in a chemical reaction. The term 'use' does imply, however, that the carbon containing raw material must be necessary for the primary purpose pursued (which is not the generation of heat).[48]

41 See, inter alia, judgments of 8 March 2017, *ArcelorMittal Rodange et Schifflange* (C-321/15, EU:C:2017:179, paragraph 24); of 18 January 2018, *INEOS* (C-58/17, EU:C:2018:19, paragraph 22); of 28 February 2018, *Trinseo Deutschland* (C-577/16, EU:C:2018:127, paragraph 39); and Case C-682/17, paragraph 62.

42 See, inter alia, judgments of 8 March 2017, *ArcelorMittal Rodange et Schifflange* (C-321/15, EU:C:2017:179, paragraph 22); of 18 January 2018, *INEOS* (C-58/17, EU:C:2018:19, paragraph 22); of 28 February 2018, *Trinseo Deutschland* (C-577/16, EU:C:2018:127, paragraph 40); and Case C-682/17, paragraph 63.

43 Judgment of 18 January 2018, *INEOS* (C-58/17, EU:C:2018:19, paragraph 25 and the case-law cited). This aim has subsequently been postponed to 2030 for sectors to be considered at low risk or no risk of carbon leakage, except district heating (although subject to review) and given up with respect to sectors and subsectors considered to be at substantial risk of carbon leakage, see the second paragraph of recital 10 of Directive 2018/410. Article 10a(11) was accordingly deleted from Directive 2003/87 by Article 1(14)(k) of Directive 2018/410. This does not, however, change the aims of the directive as it stood prior to that change. Even beyond that period, the rules regarding the free allocation of allowances have to be considered exceptional. According to recital 5 of Directive 2018/410, 'free allocation will not expire and … existing measures will continue after 2020 to prevent the risk of carbon leakage due to climate policy, [only] as long as no comparable efforts are undertaken in other major economies'.

44 I will come to the question of whether there is also a (descending) order between those three 'fallback benchmarks' when I am dealing with Question 4.

45 See Article 3(c) and (d) of Decision 2011/278.

46 See Article 3(h) of Decision 2011/278.

47 Judgment of 18 January 2018, *INEOS* (C-58/17, EU:C:2018:19, paragraph 36). There the Court even referred to process emissions as the 'final so-called "fallback" option'.

48 In the present case it does not seem contested by any of the parties that the purpose of the sulphur recovery process is not the generation of heat.

61. Such a more restrictive interpretation might be confirmed by the definition of 'process emissions' contained in Article 3(30) of Regulation No 601/2012. According to that definition, '"process emissions" means greenhouse gas emissions other than combustion emissions occurring as a result of intentional and unintentional reactions between substances or their transformation …'. The CO_2 contained in the sour gas is, however, clearly not the result of an intentional or unintentional reaction between substances or their transformation.

62. Regulation No 601/2012 deals with the monitoring and reporting of greenhouse gas emissions. Article 14 of Directive 2003/87 provided for the Commission to adopt a regulation for that purpose. Regulation No 601/2012 therefore, does not deal with, much less define the cases in which emission allowances will be allocated free of charge. For that same reason, the fact that Article 48 of Regulation No 601/2012 contains a provision stipulating to which installation inherent CO_2 is to be attributed for the purposes of monitoring and reporting of greenhouse gas emissions, does not provide any real indication as to whether any allocations of process emission certificates can be provided free of charge for such inherent emissions.

63. As Advocate General Saugmandsgaard Øe has already pointed out in his Opinion in *ExxonMobil Production Deutschland*, the concepts of 'process emissions' in Article 3(30) of Regulation No 601/2012 and of 'process emission sub-installation' in Article 3(h) of Decision 2011/278 only partly overlap because 'process emissions' are, to a large extent, covered by the product benchmarks provided for in Annex I to that decision. [49]

64. I would also be reluctant to read much into the fact that Article 48(1) of Regulation No 601/2012 contains a provision stipulating that 'inherent CO_2 which is transferred into an installation, including that contained in natural gas … shall be included in the emission factor for that fuel'. If one considers the natural gas to be a fuel, [50] as the Court seems to imply in its judgment in Case C-682/17, , [51] Article 48(1) of Regulation No 601/2012 still only contains a rule dealing with the monitoring methodology. It does not provide any real indication as to whether any allocations of process emission certificates can be provided free of charge for such inherent emissions.

65. Turning to the objective of Article 3(h)(v) of Decision 2011/278 and process emission sub-installations in general, the parties differ on this question. Whereas ExxonMobil is of the opinion that, as the risk of carbon leakage for the sulphur recovery industry is acknowledged, there must accordingly be a free allocation of emission allowance certificates for the emissions of inherent CO_2. Given this 'necessary result', in ExxonMobil's opinion Article 3(h)(v) of Decision 2011/278 must be applicable, as clearly none of the other options apply. The Federal Environment Office, on the other hand, claims that process emission sub-installations can only be recognised for emissions that arise from one of the categories of activities as per Annex I to Directive 2003/87. As, in the present case, only the combustion of fuels falls into that category, it follows that only the emissions stemming therefrom can be considered for the purposes of free allowances if there is no product emission benchmark as in the present case. This would mean that the purpose of Article 3(h) is limited to providing for free emission allowances if CO_2 emissions are the result of a (further) activity listed in Annex I to Directive 2003/87 – other than the combustion of fuels – for which no product benchmark exists.

[49] Footnote 42.

[50] Article 3(40) of Regulation No 601/2012 defines 'inherent CO_2' as CO_2 which is part of a fuel.

[51] Paragraph 54.

(a) Role of a 'significant risk of carbon leakage' in the emission trading system

66. As referred to in recital 24 of Directive 2009/29, *carbon leakage* describes a situation in which 'other developed countries and other major emitters of greenhouse gases do not participate in [an ambitious international agreement on climate change] … [which] could lead to an increase in greenhouse gas emissions in third countries where industry would not be subject to comparable carbon constraints … This could undermine the environmental integrity and benefit of actions of the Community'.[52] In order to prevent this from happening, Directive 2003/87 provides for specific measures. First, according to Article 10a(12) thereof, the yearly free allowances – which are to be allocated according to Article 10a(1) of that directive – will be kept at the level of 100% for the third trading period.[53] This is in contrast to installations in sectors and subsectors which are not exposed to a significant risk of carbon leakage where the initial allocation in 2013 is to be limited to 80% of the quantity allocated according to Article 10a(11) of Directive 2003/87. In those sectors, the quantity of free allowances will be further decreased each year by equal amounts resulting in 30% free allocations in 2020 according to Article 10a(11) of Directive 2003/87.[54]

67. That directive further provides in Article 10a(6) thereof that 'Member States may adopt financial measures in favour of sectors or subsectors determined to be exposed to a significant risk of carbon leakage due to costs relating to greenhouse gas emissions passed on in electricity prices, in order to compensate for those costs and where such financial measures are in accordance with State aid rules applicable and to be adopted in this area'.

68. From this, it is clear, as Advocate General Wahl has already pointed out in *ArcelorMittal Atlantique et Lorraine*, 'that the directive does not state that sectors deemed to be at a significant risk of carbon leakage should, in all circumstances, receive free emission allowances that correspond to all greenhouse gas emissions they emit'.[55] Rather, with respect to the allocation of emission certificates free of charge, it is a mandatory requirement that quantities of free allowances be allocated in accordance with the rules adopted according to Article 10a(1) of Directive 2003/87. These decide on the preliminary quantity of allowances. Only then can Article 10a(12) of Directive 2003/87 be applied, by not decreasing the number of allowances arrived at. Nothing in those provisions provides for the taking into account of 'the significant risk of carbon leakage' when it comes to deciding *whether* allowances of emission certificates can be allocated free of charge.[56]

69. It follows from all of this that it would be contrary to the wording as well as to the scheme of Directive 2003/87 to give a wide interpretation to the causality requirement contained in Article 3(h)(v) of Decision 2011/278 simply because the process at issue is considered to be exposed to a significant risk of carbon leakage.

[52] The conditions for a sector or subsector to be deemed to be exposed to a significant risk of carbon leakage are set out in Article 10a(14) to (17) of Directive 2003/87. The list of sectors or subsectors exposed to a significant risk of carbon leakage according to Article 10a(13) of Directive 2003/87 is contained in Commission Decision of 24 December 2009 (2010/2/EU) determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage (OJ 2010 L 1, p. 10). The 'extraction of crude petroleum and natural gas' is listed in point 1.4 of the Annex.

[53] See to that effect Case C-682/17, paragraph 94, but see also footnote 44 of this Opinion.

[54] See to that effect judgment of 26 October 2016, *Yara Suomi and Others* (C-506/14, EU:C:2016:799, paragraph 47).

[55] (C-80/16, EU:C:2017:192, point 47).

[56] See also, by analogy, judgment of 26 October 2016, *Yara Suomi and Others* (C-506/14, EU:C:2016:799, paragraph 54), where the applicants challenged the application of the uniform cross-sectoral correction factor which can be applied in order to limit the maximum annual amount of allowances according to Article 10a(5) of Directive 2003/87 to all preliminary quantities of allowances, without exempting installations in sectors or subsectors which are exposed to a significant risk of carbon leakage.

(b) Purpose of the 'process emissions sub-installation'

70. ExxonMobil contends that the goal pursued by the EU legislature with process emission sub-installations according to Article 3(h) of Decision 2011/278 is to create a sub-installation for processes from which unavoidable CO_2 emissions result but for which no product benchmark has been determined. This, however, cannot be clearly inferred from Decision 2011/278. Recital 12 of Decision 2011/278 merely states that 'where deriving a product benchmark was not feasible, *but greenhouse gases eligible for the free allocation of emission allowances occur*, those allowances should be allocated on the basis of generic fallback approaches. … For process emissions, emission allowances should be allocated on the basis of historical emissions'. [57]

71. The fourth paragraph of Article 10a(1) of Directive 2003/87 provides that 'for each sector and subsector, in principle, the benchmark shall be calculated for products rather than for inputs, in order to maximise greenhouse gas emissions reductions and energy efficiency savings *throughout each production process* of the sector or the subsector concerned'. [58] This means that process emissions will generally be included in a product benchmark. It was, however, not always possible to develop a product benchmark. One of the reasons lies in the fact that many installations are included in the emission trading system only because they operate units for the combustion of fuels in installations with a total rated thermal input exceeding 20 MW. This wide definition includes installations in a variety of sectors that are otherwise not included in the emissions trading system. As the study commissioned by the European Commission 'Methodology for the free allocation of emission allowances in the EU ETS post 2012' explained, installations that either have a total rated thermal input of less than 20 MW or that receive heat from installations under different ownership are not covered. The fact that a substantial part of the production facilities producing the product were not included in the emission trading system made the setting of a product benchmark difficult. [59] In these circumstances what might be termed the fallback options were developed with those types of cases in mind.

72. All of this means that there is no immediate link between the fact that emissions cannot be avoided and the fallback options. Article 10a(3) of Directive 2003/87 which only specifically excludes electricity generators from being allocated free allowances (with some exceptions) does not support such a broad approach either. It would have been easy to provide that the grandfathering method should be applied to all emissions subject to the emission trading scheme except those covered by a process benchmark, a heat benchmark or a fuel benchmark. Instead, a specific definition was chosen for process emissions sub-installations. Furthermore, as the representative of the Federal Environmental Office pointed out at the hearing, even if a product benchmark exists, all emissions that are inevitable by-products of chemical processes are not necessarily covered by that product benchmark. [60]

73. It therefore appears that Directive 2003/87 does not have the purpose of providing for the free allocation of emission certificates with respect to every emission that is the inevitable by-product of the use of an industrial chemical process such as the Claus process. [61]

[57] Emphasis added.

[58] Emphasis added.

[59] Ecofys, Fraunhofer Institute for Systems and Innovation Research, Öko-Institut, November 2009 (a study ordered by the European Commission), pp. ii and 25.

[60] As was pointed out by that representative, a specific product benchmark exists according to Annex II to Decision 2011/278 for 'sulphur recovery' in refineries. Product benchmarks in the refinery sector are generally based on the 'CO_2 weighted tonne' approach which does not take into account the inherent CO_2 either. With regard to that approach see recital 24 of Decision 2011/278.

[61] Although, as I have pointed out, it is already questionable whether the emissions in the present case must be considered as inevitable. See point 47 of the present Opinion.

74. In the light of the foregoing purposive analysis, I find myself concluding that the CO_2 released into the atmosphere as part of the processing of natural gas (in the form of sour gas) in the Claus process, by means of the CO_2 inherent in natural gas being separated from the gas mixture, does not occur 'as a result' of the process referred to in Article 3(h)(v) of Decision 2011/278 because the sour gas, which is a carbon-containing raw material is not 'used' within the meaning of that provision, even if, viewed simply from the literal wording of the text, that text is itself admittedly ambiguous.

C. Question 4: Is there a hierarchy between the different fallback benchmarks?

75. By its fourth questions the referring court wishes to know, which benchmark must be applied if an installation fulfils the criteria of a heat emission sub-installation as well as those of a process emission sub-installation.

76. As a preliminary point, it must be observed that, under the procedure laid down by Article 267 TFEU, providing for cooperation between national courts and the Court of Justice, it is for the latter to provide the national court with an answer which will be of use to it and enable it to determine the case before it. To that end, the Court may have to reformulate the questions referred to it. [62]

77. The referring court points out that, subject to the answer given to questions 1 to 3, it seems possible in this case that emissions from the Claus process can meet the definition both of the heat benchmark sub-installation as well as that of the process emission sub-installation. I suggest, therefore, that it would be convenient if any answer were to deal with the question of which benchmark must be applied if emissions were (contrary to my view) in fact to fulfil the criteria of a heat benchmark sub-installation as well as those of a process emissions sub-installation. [63] This encompasses the wider question of whether there is a hierarchy between the different fallback benchmarks if an installation fulfils the criteria of more than one of them.

78. As it happens, the referring court suggests that its fourth question would only arise in case Questions 1 to 3 are answered in the affirmative. As I propose to give a negative answer to these questions – which means ExxonMobil's installation is not eligible for the free allocation of allowances under the process emission benchmark – an answer to the fourth question is not strictly required. I shall nevertheless consider it in the event that the Court were to answer the first three question differently.

79. With respect to this question, the German implementing legislation contained in Paragraph 3(1) of the ZuV 2020 differs somewhat from the wording of Article 6 of Decision 2011/278. The former provision clearly establishes a hierarchy of benchmarks. Applicants for emission allowances must assign the inputs, outputs and corresponding emissions to only one of the sub-installations. The provision stipulates that inputs, outputs and corresponding emissions can only be assigned to a heat benchmark sub-installation in so far as such inputs, outputs and corresponding emissions are not already covered by a product benchmark sub-installation. An assignment of inputs, outputs and corresponding emissions to a fuel benchmark sub-installation can only take place if they are not already covered by a product or a heat benchmark

[62] Judgment of 7 November 2019, *K.H.K. (Account preservation)* (C-555/18, EU:C:2019:937, paragraph 28 and the case-law cited).

[63] This leaves aside the question of whether this is possible as the Court has already decided in its judgment of 8 September 2016, *Borealis and Others* (C-180/15, EU:C:2016:647, paragraphs 62 to 69) that they are mutually exclusive.

sub-installation. Finally, inputs, outputs and corresponding emissions can only be assigned to a process emissions sub-installation if they are not covered by any of the other benchmark sub-installations. [64]

80. Decision 2011/278 is slightly less clear when it comes to the mutual relationship of the fallback benchmarks, although the definitions of the heat, the fuel and the process emissions sub-installations provide in Article 3(c), (d) and (h) respectively that they only apply to inputs, outputs and corresponding emissions not otherwise covered by a product benchmark sub-installation. Looking further, however, at the conditions of the heat benchmark sub-installation and the fuel benchmark sub-installation, the former regards 'inputs, outputs and corresponding emissions … relating to the production, the import from an installation or other entity covered by the Union scheme, or both of *measurable heat*' [65] with some further conditions related thereto. Fuel benchmark sub-installations, on the other hand, relate to inputs, outputs and corresponding emissions relating to the production of non-measurable heat under certain further conditions.

81. This has also been found by the Court in its judgment in *Borealis and Others* where it held that the definitions of the different benchmark sub-installations are mutually exclusive. [66] With regard to process emissions sub-installations, it considered that this followed because they is 'qualified as such with regard solely to the generation of specific types of emissions referred to in Article 3(h)(i) to (vi) of Decision 2011/278. [67] The Court further found, relying on recital 12 of that decision, that, where deriving a product benchmark had not been feasible, but greenhouse gases eligible for the free allocation of emission allowances nonetheless occur, a hierarchy of three fallback approaches had been developed. [68]

82. It follows, therefore, that the question posed by the referring court has in fact already been answered by the Court in *Borealis and Others*. [69]

83. The arguments of ExxonMobil to the effect that there is no hierarchy between the fallback options or, in the alternative, that process emissions sub-installations should be given precedence because they are the more specific option, are not, with respect, persuasive. I say that for the following reasons.

84. ExxonMobil argues that heat benchmark sub-installations and process emissions sub-installations can coincide. According to ExxonMobil this is clear from the way in which the heat-related annual historical activity level is determined according to Article 9(3) of Decision 2011/278. The allocation of emissions allowances for a heat benchmark sub-installation depends on the emissions that are the result of the production of measurable heat. Those emissions are inferred from the heat that has been produced which is measured in terajoule per year. A process emissions sub-installation, on the other hand, at least that under Article 3(h)(v) of Decision 2011/278, is characterised by the fact that the emissions result from a process 'for a primary purpose other than the generation of heat'. Hence, the annual historical activity level according to

[64] The same approach is now taken in Article 10(2) of Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ 2019 L 59, p. 8).

[65] Emphasis added.

[66] Judgments of 8 September 2016, *Borealis and Others* (C-180/15, EU:C:2016:647, paragraph 62 to 65); as well as of 18 January 2018, *INEOS* (C-58/17, EU:C:2018:19, paragraph 29), and of 3 December 2020, *Ingredion Germany* (C-320/19, EU:C:2020:983, paragraph 68).

[67] Judgment of 8 September 2016, *Borealis and Others* (C-180/15, EU:C:2016:647, paragraph 66).

[68] Ibid., at paragraph 67.

[69] Judgment of 8 September 2016, *Borealis and Others* (C-180/15, EU:C:2016:647).

Article 9(5) of Decision 2011/278 is the amount of emissions measured in tonnes of its CO_2 equivalent. These arguments refer to the question whether a heat benchmark sub-installation and a process emission sub-installation can be present in the same installation but in respect of different emissions.

85. While it is true that two (or more) sub-installations relating to different activities might happen to coincide in one installation, the same inputs, outputs and emissions [70] cannot be covered by several sub-installations as, otherwise, the risk of overlaps and double-counting which is prohibited by Article 6(2) of Decision 2011/278 could arise. [71] If one were to assume that criteria applying to different sub-installations can be fulfilled by the same inputs, outputs and emissions, the concept underlying Decision 2011/278 is the following: As explained in the study commissioned by the European Commission 'Methodology for the free allocation of emission allowances in the EU ETS post 2012', three factors influence specific CO_2 emissions. They are the choice of fuel mix, the efficiency of the heat production and the efficiency of the heat end use. Product benchmarks take all of these three factors into consideration.

86. All of this is in line with recital 1 of Decision 2011/278 which provides that to the extent feasible, *ex ante* benchmarks must be determined, so as to ensure that the free allocation of emission allowances takes place in a manner that provides incentives for reductions in greenhouse gas emissions and energy efficient techniques. The methods of heat production benchmarking used for heat benchmark sub-installations, fuel mix benchmarking for fuel benchmark sub-installations and the so-called 'grandfathering' (which only takes into account historic data and which is used for process emissions) each uses one less of these factors with the grandfathering method not taking any of them into account. [72] This is the rationale for the hierarchy between the different fallback benchmarks. Benchmarking methods that provide incentives for the reduction of emissions take precedence over the process emission sub-installation where no such incentives are provided for.

87. It would therefore be contrary to the scheme of Article 10a of Directive 2003/87 and of Decision 2011/278 not to apply the hierarchy between the different benchmarks described in recital 12 of that decision.

88. In the light of those considerations, I take the view that the allocation of free emission allowances must be carried out on the basis of the heat benchmark if emissions that are subject to the emissions trading scheme were to satisfy both the defining conditions of a heat benchmark sub-installation and the defining conditions of a process emissions sub-installation. This is simply because allocations under a heat benchmark sub-installation take precedence over allocations under a process emissions sub-installation.

[70] I use the wording now used in Article 10 of Delegated Regulation 2019/331 which is clearer in that it does not only refer to emissions but rather to 'an installation's inputs, outputs and emissions' which are assigned to one or more sub-installations. This is a more adequate reference to the different sub-installations.

[71] The Member States are obliged to ensure this according to Articles 7(7) and 8(5) of Decision 2011/278. See further, judgment of 8 September 2016, *Borealis and Others* (C-180/15, EU:C:2016:647, paragraph 69).

[72] Ecofys, Fraunhofer Institute for Systems and Innovation Research, Öko-Institut, 'Methodology for the free allocation of emission allowances in the EU ETS post 2012: Report on the project approach and general issues', November 2009 (a study ordered by the European Commission), pp. 38 and 39.

D. Question 5: Can entitlements to a free allocation of emission allowances for the third trading period be met after the end of that trading period?

89. By its fifth question, the referring court wants to know whether entitlements to free allowances for the third trading period which are only established by a court after the end of that trading period can be met by free allowances for the fourth trading period.[73] Once again, this question has only been asked by the referring court if the first to fourth questions are answered in the affirmative. Given my answers to those questions, this case does not arise. I nonetheless propose to consider the question in the event that the Court were to decide differently.

90. The referring court's doubts with respect to this question are mainly the result of the Bundesverwaltungsgericht's (Federal Administrative Court, Germany) case-law. That court had decided that (open) claims for additional allocations for the second trading period (2008 to 2012) had lapsed at the latest by 30 April 2013 (midnight).[74]

91. It should be observed, however, that the legal situation at the end of the second trading period was quite different from the one at the end of the third trading period. Whereas, according to Article 13(1) of Directive 2003/87, allowances issued during one trading period were only valid for emissions during that trading period, that wording was amended by Directive 2018/410. The first sentence of Article 13 of Directive 2003/87 now reads 'Allowances issued from 1 January 2013 onwards shall be valid indefinitely …'.[75] This is possible due to the general continuity of rules between the third and the fourth trading periods. The question is essentially whether, and, if so, in what way, a possible entitlement to the free allocation of emission allowances can be met in the absence of a specific provision dealing with this question.

92. The referring court specifically asked whether an entitlement to a further free allocation of emission allowances for the third trading period can be met with allowances in respect of the fourth trading period in such a case. According to the second sentence of Article 13 of Directive 2003/87 (as amended by Directive 2018/410), allowances issued from 2021 shall only be valid from the beginning of the 10-year period in which they were issued. Therefore, a plaintiff who has been awarded a right to the allocation of free allowances would not be able to meet its obligations according to Article 12(3) of Directive 2003/87 with allowances for the fourth trading

[73] ExxonMobil has informed the Court that it had applied for interim relief by an application to the referring court on 16 July 2020. It sought a declaration by that court obliging the DEHSt to ensure that a number equivalent to the number of emission certificates requested to be allocated in the proceedings underlying the present request for a preliminary ruling be entered into ExxonMobil's operator holding account, by 31 December 2020 at the latest, in order to secure its allocation entitlements. In reaction to this, but prior to the referring court's decision on the matter, the DEHSt had applied to the Commission for the transfer of that number of emission certificates to either the national allowance holding account of the Federal Republic of Germany or to ExxonMobil's operator holding account. This application was rejected by the Commission by a letter addressed to the DEHSt on 8 December 2020. The referring court issued an order providing for interim measures on 15 December 2020 (VG 10 L 216/2020) whereby it compelled the DEHSt to assert that, should the emission certificates for the trading period of 2013 to 2020 lapse, it will treat ExxonMobil as if this had not happened. That order was quashed by the Oberverwaltungsgericht Berlin-Brandenburg (Higher Administrative Court, Berlin-Brandenburg, Germany) on 23 December 2020 and ExxonMobil's application was finally dismissed (ECLI:DE:OVGBEBB:2020:0323.OVG11S12.20.00). An application to the Bundesverfassungsgericht (Federal Constitutional Court, Germany) for interim relief was unsuccessful (ECLI:DE:BVerfG:2020:qk20201229.1bvq016120). In parallel, ExxonMobil had, on 17 December 2020, started proceedings challenging the legality of the Commission's decision of 8 December 2020 addressed to the DEHSt according to Article 263 TFEU. It further applied for interim measures according to Article 279 TFEU. That action was dismissed by order of the President of the General Court of 31 December 2020, *ExxonMobil Production Deutschland* v *Commission* (T-731/20 R, not published, EU:T:2020:654), inter alia because it was considered unlikely that non-fulfilled rights to the free allowance of emission certificates would lapse at the end of the third trading period (at paragraph 17).

[74] Judgment of the Bundesverwaltungsgericht (Federal Administrative Court) of 26 April 2018 (ECLI:DE:BVerwG:2018:260418U7C20.16.0).

[75] According to Article 27 of Delegated Regulation 2019/331, Decision 2011/278 shall continue to apply to allocations relating to the period prior to 1 January 2021 beyond the repeal of that decision.

period. In order to provide a useful answer to the referring court, its question might conveniently be therefore reformulated. Accordingly, the question to be answered should not be limited to whether such an entitlement can be met with allowances of the fourth trading period.

93. There are two aspects to the question of how a possible entitlement to the free allocation of emission allowances for the third trading period can be met. There is first the procedural basis for such a change in allocation and, second, the question of the 'origin' of these allowances. With respect to the first of these issues, as the German Government, represented by the Federal Ministry for Economic Affairs and Energy as well as the Commission have pointed out, any adjustment constitutes a change to the national allocation table provided for by Article 52 of Regulation No 389/2013[76] which, according to Article 88 of Delegated Regulation 2019/1122,[77] shall continue to apply until 1 January 2026 to all operations required in relation to the trading period between 2013 and 2020. If a court judges that an operator is entitled to a further allocation free of charge of emission allowances, the Member State concerned will inform the Commission accordingly (Article 52(2)(d) of Regulation No 389/2013) and the Commission will instruct the central administrator to make the corresponding changes to the national allocation table in the European Union Transaction Log.[78] The central administrator will then ensure that the Union Registry transfers the respective allowances from the EU Allocation Account in accordance with the adjusted national allocation table to the operator holding account according to Article 53(2) of Regulation No 389/2013.

94. As for the second aspect, namely the origin of those allowances, while neither Directive 2003/87, nor Decision 2011/278 nor Delegated Regulation 2019/331 specifically deal with the adjustment of free allowances due to a decision by a court and, although Article 24(2) of Decision 2011/278 does not refer to an increase in allowances as a result of a decision by a court, that latter article can be applied to such cases by analogy. The difference to the case in which such a decision by a court is taken prior to the end of the trading period and the situation when it is taken thereafter, is that the respective allowances can no longer be deducted from the number of allowances to be auctioned by the respective Member State during that period.

95. While it is not the purpose of the market stability reserve to provide certificates for claims that have remained unfulfilled at the end of the third marketing period, but rather to tackle structural supply demand imbalances in the emission trading scheme,[79] allowances from this source are suited to the first purpose. The reason for this is the structure and the purpose of the market stability reserve.

96. According to Article 1(2), (3) and (5) of Decision 2015/1814, the market stability reserve is made up of: (i) 900 million allowances which were meant to be auctioned during the years 2019 and 2020 according to the third column of Annex IV to Regulation No 176/2014,[80] (ii) allowances not allocated to new entrants according to Article 10a(7) of Directive 2003/87 and to installations

[76] Commission Regulation (EU) No 389/2013 of 2 May 2013 establishing a Union Registry pursuant to Directive 2003/87/EC of the European Parliament and of the Council, Decisions No 280/2004/EC and No 406/2009/EC of the European Parliament and of the Council and repealing Commission Regulations (EU) No 920/2010 and No 1193/2011 (OJ 2013 L 122, p. 1).

[77] Commission Delegated Regulation (EU) 2019/1122 of 12 March 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards the functioning of the Union Registry (OJ 2019 L 177, p. 3).

[78] The Commission will verify, in accordance with the second sub-paragraph of Article 52(2) of Regulation No 389/2013 whether such change is in conformity with, mainly Directive 2003/87 and Decision 2011/278 and will reject such changes if this is not the case.

[79] See, to that, effect recital 4 of Decision 2015/1814.

[80] Commission Regulation (EU) No 176/2014 of 25 February 2014 amending Regulation (EU) No 1031/2010 in particular to determine the volumes of greenhouse gas emission allowances to be auctioned in 2013-20 (OJ 2014 L 56, p. 11). As a short-term measure against the surplus of allowances in the market, they had originally been 'back-loaded' by reducing the volumes in 2014 to 2016 with the intention of having them auctioned in 2019 and 2020.

that have (partially or fully) ceased their operations or have significantly reduced their capacity (Article 10a(19) and (20) of Directive 2003/87), and (iii) a number of allowances equal to 12% of the total number of allowances in circulation per year [81] if that number exceeds 100 million.

97. These allocation rules are merely a way of taking a surplus of allowances off the market and to reintroduce parts or all of them back into the market if the number of allowances in circulation falls below a threshold of 400 million allowances in circulation. Allowances that should have been allocated to the operator of an installation, had Directive 2003/87 and Decision 2011/278 been applied correctly, do not constitute such surplus and can therefore be taken from the market stability reserve without affecting the overall number of allocations. Neither is the market stability reserve's purpose compromised by deducting a limited number of allowances from the market stability reserve and adding them to the number in circulation. As the allowances for the third marketing period which can thus be allocated are of indefinite validity according to the first sentence of Article 13 of Directive 2003/87, [82] they can be used by the recipient either for the third trading period or during trading periods beyond the third trading period.

98. In light of the above I propose to conclude that entitlements to a further free allocation of emission allowances for the third trading period can be met after the end of the third trading period with allowances of the third trading period where the existence of the allowance entitlement is established by a court only after expiry of the third trading period. Allowances for the third trading period do not lapse on expiry of the third trading period.

V. Conclusion

99. In the light of the foregoing considerations, I propose that the Court should answer the questions referred for a preliminary ruling by the Verwaltungsgericht Berlin (Administrative Court, Berlin, Germany) as follows:

(1) The CO_2 released into the atmosphere as part of the processing of natural gas (in the form of sour gas) in the Claus process, by means of the CO_2 inherent in natural gas being separated from the gas mixture but which is not itself used in the course of the chemical desulphurisation reaction, does not occur as a result of the process referred to in Article 3(h)(v) of Commission Decision 2011/278/EU of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council because the sour gas, which is a carbon-containing raw material is not 'used' within the meaning of that provision.

(2) The allocation of free emission allowances must be carried out on the basis of the heat benchmark if emissions that are subject to the emissions trading scheme were to satisfy both the defining conditions of a heat benchmark sub-installation and the defining conditions of a process emissions sub-installation. This is so because allocations under a heat benchmark sub-installation take precedence over allocations under a process emissions sub-installation.

[81] According to Article 1(4) of Decision 2015/1814 this is the cumulative number of allowances issued in the period since 1 January 2008 and entitlements to use international credits exercised by installations under the EU ETS in respect of emissions up to 31 December of that year, minus the cumulative tonnes of verified emissions from installations under the EU emissions trading system between 1 January 2008 and 31 December of that year, any allowances cancelled and the number of allowances in the reserve.

[82] As amended by Directive 2018/410.

(3) Entitlements to a further free allocation of emission allowances for the third trading period can be met after the end of the third trading period with allowances of the third trading period where the existence of the allowance entitlement is established by a court only after expiry of the third trading period. Allowances for the third trading period do not lapse on expiry of the third trading period.