Van: [redacted]
Aan: [redacted]
Cc: [redacted]
Onderwerp: RE: terugkoppeling besluitvorming CO2 projecten Noord-Holland
Datum: woensdag 21 februari 2018 09:57:39
Bijlagen: image001.jpg

Beste mensen,
Mijn excuses om het via deze manier te doen terwijl ik niet iedereen ken, maar het lijkt me voor nu het duidelijkst. Ik zie dat het iets te snel gaat. Er is afgelopen maandag in de Statencommissie niet expliciet gesproken over de projecten. Er is een totaalbedrag voor energietransitie aangegeven (zo'n 24 miljoen) waarbij gedacht wordt aan projecten zoals CO2 in glastuinbouw. De voorbereidingen kunnen wel doorlopen maar er is geen besluitvorming op 26 maart over de specifieke projecten of bedragen. De voorstellen zijn inderdaad ambtelijk gedaan maar er is dus geen mogelijkheid om dit extern te melden. Onze inzet is er nog steeds opgericht om zo snel mogelijk duidelijkheid te geven.
Voor vragen ben ik natuurlijk bereikbaar op onderstaand telefoonnummer.
Met vriendelijke groeten,

[redacted]
Provincie Noord-Holland
Sectormanager Regionale Economie & Erfgoed
Telefoon: 06-[redacted]
e-mail: [redacted]@noord-holland.nl
cid:image001.jpg@01D0D4E8.CF247AC0

Van: [redacted]
Verzonden: dinsdag 20 februari 2018 14:08
Aan: [redacted]
CC: [redacted]
Onderwerp: terugkoppeling besluitvorming CO2 projecten Noord-Holland
Dag [redacted],
Hieronder een update over de CO_2 projecten besluitvorming:
Ambtelijk is voorgesteld is om subsidiebudget te ramen voor het project afvangen zuivere CO_2 bij N.V. HVC (project 1b): 1,5 miljoen én
voor het project lokaal CO_2 leidingennetwerk: 3 miljoen. Gisteren zijn in de PS Commissie deze projecten CO_2 besproken. De Commissie heeft voor deze projecten geen specifieke opmerkingen gemaakt,
dat betekent dat die voorstellen nu ter besluitvorming aan PS van 26 maart a.s. worden voorgelegd. Daar vindt de definitieve besluitvorming plaats (zij kunnen er dus nog wel wat van vinden).
Mijn voorstel is om toch vooruitlopend op de besluitvorming in maart alvast wat verder voorwerk te verrichten; t.w. de interne processen op te starten om tot een volwaardige subsidieaanvraag te kunnen komen eind 2018; aangezien er naar alle waarschijnlijkheid ook sprake is van staatsteun (EU proces duurt nu eenmaal minimaal 6 maanden) moeten we daarop nu al acteren.
Mijn collega [redacted] is bereid om het interne proces binnen de provincie en het proces richting EU (staatssteun) te begeleiden. Hij zal binnenkort een voorstel mailen over welke stappen er nog doorlopen zullen moeten worden.

Voor de opstart van het proces heb ik nodig: https://www.noord-holland.nl/Loket/Subsidies/Algemene_formulieren_om_subsidie_aan_te_vragen -> Aanvraagformulier subsidie buiten uitvoeringsregeling - Post

@[redacted]: een uitgeschreven tekst + begroting voor het deelproject van AEB (daarvoor graag het standaard PNH subsidieaanvraagformulier gebruiken, zie link hierboven).

Onderstaande tekst over het OCAP project is zoals hieronder binnen de provincie op hoofdlijn omschreven:

Een lokaal CO_2- leidingnetwerk. Op dit moment kan de CO_2 vanuit Rotterdam ook deels al ingezet worden voor de glastuinbouwgebieden in Noord-Holland Noord. Daarvoor is een CO_2 vervloeiingsinstallatie nodig en in de glastuinbouwgebieden een CO_2 verdamper, collectieve CO_2 opslagtank en lokaal CO_2 distributienetwerk bij Alton en Het Grootslag. Het Grootslag treft voor het distributienetwerk zelf maatregelen (ECW en tuinders) bij Alton neemt OCAP het voortouw. De meest logische locatie voor de vervloeier zou zijn op het terrein van AEB (aansluiting op OCAP leidingnetwerk 2,5 km), vanwege de ambitie om bij AEB ook CO_2 te gaan afvangen en zuiveren.

@[redacted]: jij heb al een tekst bij mij aangeleverd. Graag die tekst (eventueel nog aangescherpt) in het standaard PNH subsidieaanvraagformulier opnemen, zie link hierboven.

Onderstaande tekst over het HVC project is zoals hieronder binnen de provincie op hoofdlijn omschreven:

Afvangen zuivere CO_2 bij N.V. HVC voor de glasdriehoek (Alton, Agriport A7 en Het Grootslag) in Noord-Holland. Dit houdt in afvangen, vloeibaar maken en distribueren van CO_2 van de HVC naar de glastuinbouwconcentratiegebieden in Noord-Holland Noord.

a) Afvangst bij verbrandingsoven

b) Afvangst bij biomassa vergister

Kunnen jullie deze stukken binnenkort aanleveren, binnen 2 weken?

Met vriendelijke groeten,

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

T (023) [redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

Van: [redacted]
Aan: [redacted]
Cc: [redacted]
Onderwerp: verzoek CO2 / glastuinbouw projecten Noord-Holland
Datum: dinsdag 27 maart 2018 17:38:00
Bijlagen: image001.jpg
image002.jpg

Beste [redacted] en [redacted],
Zoals [redacted] hieronder aankondigde: ik ben gevraagd om het proces rondom de subsidieverlening voor de CO2 / glastuinbouwprojecten vanuit de provincie Noord-Holland te begeleiden.
Over het geld: gisteren hebben provinciale staten besloten om € 24 mln te reserveren voor o.a. projecten onder het kopje 'energietransitie'. Daarmee hebben we budget. Onze CO2 / glastuinbouwprojecten worden daar niet concreet genoemd, maar zijn wel onderdeel van die € 24 mln. Dat betekent dat ik ervan uit ga dat we dit jaar nog kunnen de volgende twee projecten kunnen subsidiëren:
- € 1,5 mln voor het project van HVC – afvangen CO2 uit de biomassa vergister te Middenmeer
- € 3 mln voor project van OCAP – vervloeiingsinstallatie voor CO2 bij de AEB en lokaal CO2 netwerk Alton en Grootslag

Wat nog ontbreekt en absoluut noodzakelijk is, zijn uitgewerkte projectplannen voor deze projecten. In de mail hieronder vraagt Danielle daarom. Je kunt het subsidieformulier daarvoor gebruiken, maar dat is op dit moment nog niet noodzakelijk. Het gaat nu vooral om uitgewerkte projectbeschrijvingen waar duidelijk is wat het project behelst, wat de onderdelen zijn, wat de planning is, wat de kosten zijn, etc. Alleen dan kan de staatssteuntoets en subsidieaanvraag goed beoordeeld worden. Die staatssteuntoets kan lang duren (we rekenen op een half jaar) dus we willen er tijdig bij zijn!
Dit is de planning en volgorde der dingen:

- Begin april 2018: projectplannen zijn door provincie NH ontvangen en Europese staatssteuntoets kan starten
- April t/m september/oktober: provincie beoordeelt de projectvoorstellen en onderbouwt waarom Europa akkoord zou moeten gaan met vrijstelling van staatssteun en dient dit in (NB: afhankelijk hoe dit beoordeeld wordt, kan er wellicht een lichte procedure gevolgd worden, maar we moeten rekening houden met een zware procedure)
- Mei 2018: provincie regelt intern dat de projecten met naam en toenaam op de begroting van 2018 komen te staan (= harde voorwaarde voor subsidieverlening in 2018)
- September: jullie dienen formeel de subsidieaanvraag in (kan ook eerder) via het subsidieformulier.
- September/oktober: hopelijk is dan de positieve uitslag binnen van de staatssteuntoets.
- Oktober: wij verlenen de subsidie.

Wellicht ten overvloede: zonder staatssteuntoets kan er geen subsidie worden verleend.
Wat ik dus van jullie vraag, is om projectplannen in te sturen. Dit is urgent en echt noodzakelijk, want zonder uitgewerkte plannen kunnen we niet starten.
Hoe langer dit duurt, des te groter is de kans dat het niet gaat lukken om dit jaar subsidie te verlenen. In dat geval moeten we het een jaar doorschuiven en dat zou jammer zijn.
Lukt het om die plannen binnen een week of twee te leveren?
Ik hoor graag van jullie of dit lukt en of dit op een of andere manier knelt, en wat we dan kunnen doen.
Vriendelijke groet,

[redacted]

Beleidsadviseur economie
Sector Regionale Economie en Erfgoed
Provincie Noord-Holland

T (023) [redacted]
M 0[redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

Van: [redacted]
Verzonden: dinsdag 20 februari 2018 14:08
Aan: [redacted]
CC: [redacted]
Onderwerp: terugkoppeling besluitvorming CO2 projecten Noord-Holland

Dag [redacted],

Hieronder een update over de CO_2 projecten besluitvorming:

Ambtelijk is voorgesteld is om subsidiebudget te ramen voor het project afvangen zuivere CO_2 bij N.V. HVC (project 1b): 1,5 miljoen én
voor het project lokaal CO_2 leidingennetwerk: 3 miljoen. Gisteren zijn in de PS Commissie deze projecten CO_2 besproken. De Commissie heeft voor deze projecten geen specifieke opmerkingen gemaakt,
dat betekent dat die voorstellen nu ter besluitvorming aan PS van 26 maart a.s. worden voorgelegd. Daar vindt de definitieve besluitvorming plaats (zij kunnen er dus nog wel wat van vinden).
Mijn voorstel is om toch vooruitlopend op de besluitvorming in maart alvast wat verder voorwerk te verrichten; t.w. de interne processen op te starten om tot een volwaardige subsidieaanvraag te kunnen komen eind 2018; aangezien er naar alle waarschijnlijkheid ook sprake is van staatsteun (EU proces duurt nu eenmaal minimaal 6 maanden) moeten we daarop nu al acteren.
Mijn collega [redacted] is bereid om het interne proces binnen de provincie en het proces richting EU (staatssteun) te begeleiden. Hij zal binnenkort een voorstel mailen over welke stappen er nog doorlopen zullen moeten worden.

Voor de opstart van het proces heb ik nodig: https://www.noord-holland.nl/Loket/Subsidies/Algemene_formulieren_om_subsidie_aan_te_vragen -> Aanvraagformulier subsidie buiten uitvoeringsregeling - Post
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Onderstaande tekst over het OCAP project is zoals hieronder binnen de provincie op hoofdlijn omschreven:

Een lokaal CO_2- leidingnetwerk. Op dit moment kan de CO_2 vanuit Rotterdam ook deels al

ingezet worden voor de glastuinbouwgebieden in Noord-Holland Noord. Daarvoor is een CO_2 vervloeiingsinstallatie nodig en in de glastuinbouwgebieden een CO_2 verdamper, collectieve CO_2 opslagtank en lokaal CO_2 distributienetwerk bij Alton en Het Grootslag. Het Grootslag treft voor het distributienetwerk zelf maatregelen (ECW en tuinders) bij Alton neemt OCAP het voortouw. De meest logische locatie voor de vervloeier zou zijn op het terrein van AEB (aansluiting op OCAP leidingnetwerk 2,5 km), vanwege de ambitie om bij AEB ook CO_2 te gaan afvangen en zuiveren.
@[redacted]: jij heb al een tekst bij mij aangeleverd. Graag die tekst (eventueel nog aangescherpt) in het standaard PNH subsidieaanvraagformulier opnemen, zie link hierboven.
Onderstaande tekst over het HVC project is zoals hieronder binnen de provincie op hoofdlijn omschreven:
Afvangen zuivere CO_2 bij N.V. HVC voor de glasdriehoek (Alton, Agriport A7 en Het Grootslag) in Noord-Holland. Dit houdt in afvangen, vloeibaar maken en distribueren van CO_2 van de HVC naar de glastuinbouwconcentratiegebieden in Noord-Holland Noord.

a) Afvangst bij verbrandingsoven

b) Afvangst bij biomassa vergister

Kunnen jullie deze stukken binnenkort aanleveren, binnen 2 weken?

Met vriendelijke groeten,

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

T (023)[redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

Van: [redacted]
Aan: [redacted]@ocap.nl"; [redacted] @hvcgroep.nl"; [redacted] @meerlanden.nl
Cc: [redacted] Subsidia;
Onderwerp: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a.s.
Datum: donderdag 26 april 2018 17:34:43
Prioriteit: Hoog

Beste [redacted],
De provincie Noord-Holland maakt zich op voor de Europese staatssteuntoetsen van vier projecten:

- OCAP De Kwakel
- OCAP vervloeien bij AEB en lokale infrastructuur bij Alton en Het Grootslag
- HVC Middenmeer
- Meerlanden Haarlemmermeer

Dat vraagt van de provincie maar zeker ook van jullie een enorme inzet om ervoor te zorgen eind dit jaar een evt. subsidiebeschikking te kunnen afgeven.
Wij hebben daarom [redacted] van Subsidia gevraagd ons te ondersteunen bij dit proces.
NB: De HVC en Meerlanden projecten zien wij als twee losse subsidieaanvragen. Beiden moeten dus apart een projectplan indienen. Simpele reden daarvoor is dat er twee projecteigenaren zijn die afzonderlijk verantwoordelijkheid dragen voor de projectresultaten.
Gewenste planning (we hebben geen invloed op de planning van de Europese Commissie)
Om aan te geven wat de strakke planning is heb ik hieronder een tijdbalk opgenomen. Deze geeft de deadlines aan in 2018. Een race tegen de klok dus, met hollen en stilstaan.

jan	feb	mrt	apr	mei	juni	juli	aug	sept	okt	nov	dec
Motie 110 GS	Gesprekken met initiatiefnemers opstarten	Inzet motie 110 PS	Projectplannen concretiseren + 100% commitment alle partijen	8 mei: Projectplannen liggen klaar voor staatststeunanalyse (plannen kunnen hierna niet meer aangepast worden, dus definitieve verhaal+begroting) PNH Zomernota + buiten UVR	1 juni: prenotificering EU vier projecten Alle dossiers compleet aanleveren bij BZK (SAN)	Begin juli vragen vanuit BZK beantwoorden Eind juli: hopelijk besluit BZK om te notificeren	Reces EU	Begin sept: notificeren (minimaal 2 maanden)	Eind okt uitspraak EU over staatsteuntoets	Begin nov beschikking afd Subsidies Dat kan alleen omdat de provinciale subsidiemedewerkers en hun collega s hiervoor op voorhand tijd reserveren en voorwerk hebben kunnen doen	5 dec provinciale afsluiting begrotingsjaar 2018

In deze periode van april tot 8 mei a.s. moeten de vier projectplannen worden geconcretiseerd naar de 100% versies. Precies in de meivakantie, dat realiseren we ons, maar gelukkig is de meeste informatie al wel beschikbaar. Voor Mark is een paar dagen later ook niet onoverkomelijk, maar dan graag wel in afstemming met hem. Een 100% versie betekent inhoudelijk dat op onderstaande vragen/onderwerpen in het projectplan wordt ingegaan (zie opsomming puntenlijst projectplannen). Graag jullie inzet en check daarop. Immers hoe beter het projectplan/business case is, des te meer kans er is op een positieve uitslag vanuit de EU. Het moet een plan zijn waar de projecteigenaar comfort bij heeft en bedenk dat de beoordelaars allergisch zijn voor tussentijdse wijzigingen.
Als het niet lukt om de projecten op 8 mei a s. in de 100% versie te hebben moeten we helaas samen constateren dat de uitvoeringsgereedheid van het project te rooskleurig is ingeschat. We nemen dat project dan niet mee in dit traject. In overleg met de initiatiefnemer wordt dan afgestemd of uitstel of afstel aan de orde is.
Puntenlijst projectplannen:

- Technisch-inhoudelijke beschrijving van de investering op onderdelen
- Is dit een demonstratie van een nieuwe technologie? Zo ja, vloeit het dan voort uit R&D-werkzaamheden van de aanvrager?
- Welke onderneming(en) investeren in het project?
- Wat is de locatie? Lay-out aanleveren
- Welke andere ondernemingen doen noodzakelijke investeringen buiten het subsidiabele project om, die nodig zijn om CO2 van uitstoot naar consumptie te krijgen?
- Welke onderneming(en) is/zijn eigenaar van de CO2 bron
- Technisch-inhoudelijke beschrijving van de CO2 bron
- Zijn er andere subsidies ontvangen?
- Levert CO2-uitkoppeling nog andere voordelen op?
- Marktanalyse: vraag naar CO2, prognose levering en omzet
- Prijsvorming en prijzen inkoop, transport en distributie (verkoopprijs) CO2.
- Aan welke onderneming(en) wordt geleverd?
- Zijn dit bestaande ondernemingen? Moeten ze zich nog vestigen?
- Op welke wijze ontstaat er een milieuvoordeel als gevolg van dit project?
- Hoe groot is dit milieuvoordeel op jaarbasis?
- Op basis van welk intern criterium wordt besloten dat het project wordt gerealiseerd/de investering wordt gepleegd.
- Cashflowmodel ex rente, afschrijvingen en interne doorbelastingen, met en zonder subsidie.
- Risicoparagraaf.

Als jullie over bovenstaande puntenlijst nog een nadere toelichting willen hebben kunnen jullie terecht bij [redacted] (Subsidia - Tel + [redacted]).
Maar [redacted] gaat dus niet de projectplannen schrijven, hij kan wel tegenlezen en goede aanwijzingen geven voor verbetering.

Voor het opstellen van de staatsteunanalyses van de vier projecten en de beleidsmatige onderbouwing daarvan staat de periode van 8 mei t/m 1 juni. Daarna start het EU traject, inhoudelijk gaan we dan ook niets meer aanpassen in de projectplannen. We zetten juist in op versnelling richting de notificatie. Voor vragen vanuit BZK en EU willen we jullie daarom ook vragen stand-by te staan tijdens het EU traject om eventuele toelichtingen te geven in Den Haag of Brussel en schriftelijk vragen te beantwoorden. De coördinatie daarvan zal [redacted] ook op zich nemen.

Subsidiebeschikking Noord-Holland
Voorsorterend op het soepel opstellen van de provinciale subsidiebeschikking dit jaar, kan uiterlijk in oktober 2018 de formele subsidieaanvraag ingediend worden, voorafgaand aan opstellen en routing beschikking in november. De subsidieaanvraag bestaat uit:
- Aanvraagformulier subsidie; ondertekend en met aangegeven verplichte bijlagen.
- Projectinformatie (formulier) bij subsidieaanvraag.
- Bijlagen o.a. Begroting project, Financieringsplan en Planning (zie hierboven).

We zien uit naar een fijne samenwerking de komende maanden en hopen op een gunstige beoordeling van de projecten.

[redacted] en ik zijn uiteraard ook voor jullie beschikbaar voor vragen of om mee te sparren.

Met vriendelijke groeten, namens [redacted] en

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

T (023) [redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: Memo staatssteuntraject CO2 projecten Noord-Holland
Datum: maandag 7 mei 2018 16:28:44
Bijlagen: Memo Staatssteun CO2 projecten PNH_070518.pdf

Beste allen,
Bijgaand ontvangen jullie mijn startmemo inzake de staatssteuntrajecten. Op basis van de project-specifieke informatie ga ik verder (zie memo).
Met vriendelijke groet,

[redacted]
Subsidia - Postbus 68 - 7620 AB - BORNE
Tel +[redacted]
[redacted] - LinkedIn

Van: [redacted]
Aan: [redacted]
Cc: [redacted] | Subsidia; [redacted]
Onderwerp: Re: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a.s.
Datum: dinsdag 8 mei 2018 16:12:45
Bijlagen: OCAP-MD-20180508 Financieel model OCAP CO2 vloeistofmaker en minigrids.pdf
OCAP-ME-20180508 OCAP CO2 vloeistofmaker en minigrids.pdf

Beste [redacted]
Bijgaand een beschrijving van het project "OCAP CO2 vloeistofmaker & minigrids" naar aanleiding van het gesprek met [redacted] en per punt zoals genoemd in onderstaande email Tevens de cashflow overzichten met/zonder subsidie in pdf Als er nog wat mist, dan hoor ik dat graag!
Met vriendelijke groet,
[redacted]
OCAP CO2 BV

Van: '[redacted]
Datum: donderdag 26 april 2018 om 17:34
Aan: [redacted] @hvcgroep.nl'" , [redacted]
CC: [redacted] | Subsidia , '[redacted]
Onderwerp: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a s.

Caution: The identity of the sender of this message could not be verified as it originates from the Internet Please pay attention!

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- OCAP vervloeien bij AEB en lokale infrastructuur bij Alton en Het Grootslag
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Dat vraagt van de provincie maar zeker ook van jullie een enorme inzet om ervoor te zorgen eind dit jaar een evt. subsidiebeschikking te kunnen afgeven.
Wij hebben daarom Mark Strootman van Subsidia gevraagd ons te ondersteunen bij dit proces.
NB De HVC en Meerlanden projecten zien wij als twee losse subsidieaanvragen. Beiden moeten dus apart een projectplan indienen. Simpele reden daarvoor is dat er twee projecteigenaren zijn die afzonderlijk verantwoordelijkheid dragen voor de projectresultaten.
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- Op welke wijze ontstaat er een milieuvoordeel als gevolg van dit project?
- Hoe groot is dit milieuvoordeel op jaarbasis?
- Op basis van welk intern criterium wordt besloten dat het project wordt gerealiseerd/de investering wordt gepleegd.
- Cashflowmodel ex rente, afschrijvingen en interne doorbelastingen, met en zonder subsidie.
- Risicoparagraaf.

Als jullie over bovenstaande puntenlijst nog een nadere toelichting willen hebben kunnen jullie terecht bij [redacted] (Subsidia - Tel + [redacted]).
Maar [redacted] gaat dus niet de projectplannen schrijven, hij kan wel tegenlezen en goede aanwijzingen geven voor verbetering.

Voor het opstellen van de staatsteunanalyses van de vier projecten en de beleidsmatige onderbouwing daarvan staat de periode van **8 mei t/m 1 juni.** Daarna start het EU traject, inhoudelijk gaan we dan ook niets meer aanpassen in de projectplannen. We zetten juist in op versnelling richting de notificatie. Voor vragen

vanuit BZK en EU willen we jullie daarom ook vragen stand-by te staan tijdens het EU traject om eventuele toelichtingen te geven in Den Haag of Brussel en schriftelijk vragen te beantwoorden. De coördinatie daarvan zal [redacted] ook op zich nemen.

Subsidiebeschikking Noord-Holland

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- Aanvraagformulier subsidie; ondertekend en met aangegeven verplichte bijlagen.
- Projectinformatie (formulier) bij subsidieaanvraag.
- Bijlagen o.a. Begroting project, Financieringsplan en Planning (zie hierboven).

We zien uit naar een fijne samenwerking de komende maanden en hopen op een gunstige beoordeling van de projecten.

[redacted] en ik zijn uiteraard ook voor jullie beschikbaar voor vragen of om mee te sparren.

Met vriendelijke groeten, namens [redacted] en

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

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Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

MEMO

onderwerp: OCAP CO2 vloeistofmaker & minigrids

datum: 8/5/2018

kenmerk: OCAP-ME-20180508-JLi

aan:

cc:

van: [redacted]

1 Inleiding

Dit document geeft een beschrijving van het project "OCAP CO2 vloeistofmaker & minigrids" aan de hand van de door de Provincie Noord-Holland gestelde punten en vragen ten behoeve van de subsidieaanvraag en staatssteun toets, dd 26 april 2018.

- Technisch-inhoudelijke beschrijving van de investering op onderdelen

OCAP CO2 BV realiseert op het terrein van AEB te Amsterdam een liquefier (vloeistofmaker) met opslag waarmee gasvormige CO2 vloeibaar kan worden gemaakt. Hiertoe moet een leiding worden aangelegd van 2,5 kilometer waarmee de bestaande OCAP-leiding wordt aangesloten op de locatie van AEB. De liquefier wordt gevoed met CO2 afkomstig van de twee bestaande bronnen van OCAP: Shell en Alco. De vloeibare CO2 wordt met vrachtwagens geleverd aan twee nieuw te realiseren lokale CO2 netwerken in de glastuinbouwgebieden Alton en Het Grootslag alsmede aan het bestaande minigrid in Agriport. [redacted]

Voor de locatie AEB is gekozen vooruitlopend op de realisatie van een grootschalig CO2-afvangproject uit de rookgassen bij AEB en omdat voor de locatie een connectie met het bestaande OCAP-netwerk nodig is. Daarnaast spelen in het Amsterdamse havengebied verschillende projecten waarbij in de toekomst mogelijk CO2 van biogene oorsprong ('bio-CO2') kan worden afgenomen voor vervloeiing en levering aan de glastuinbouw.

De investering is daarmee: liquefier met CO2 opslagtanks en verdamper, CO2-pijpleiding en minigrids.

- Is dit een demonstratie van een nieuwe technologie? Zo ja, vloeit het dan voort uit R&D-werkzaamheden van de aanvrager?

Nee, het betreft investeringen in gangbare technologie.

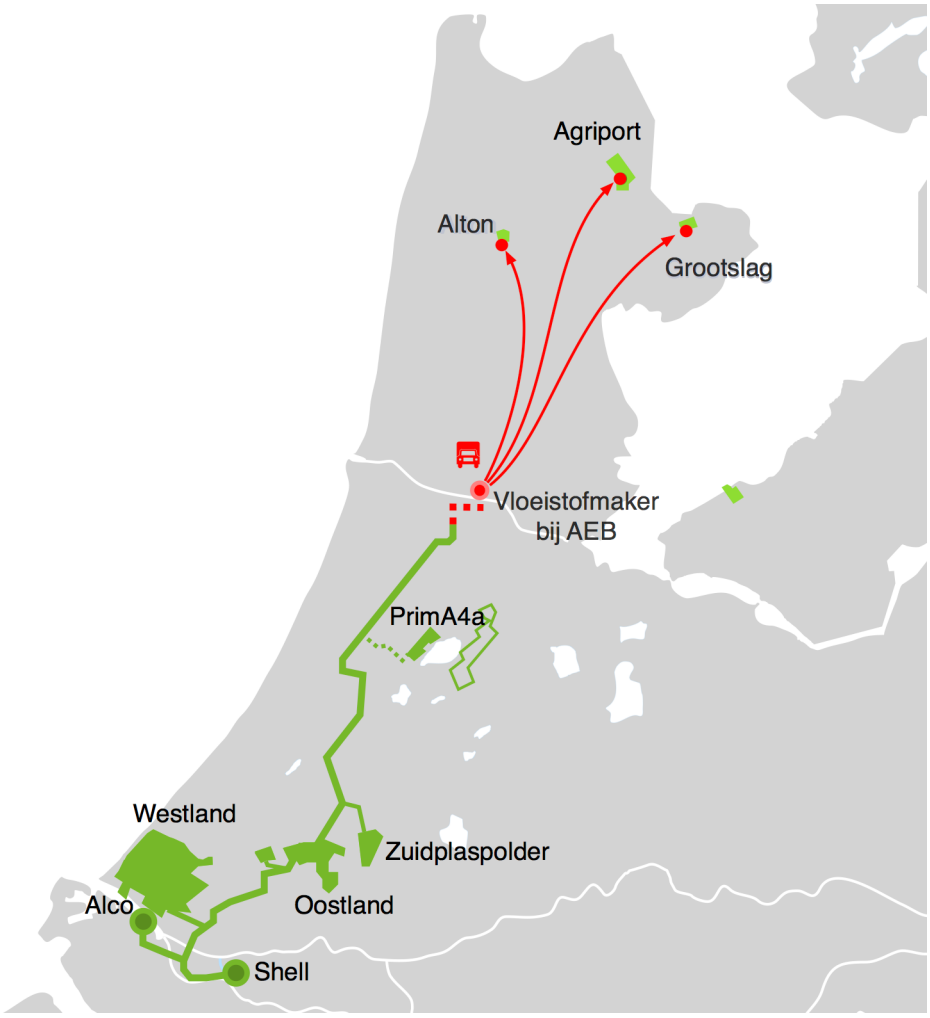
- Welke onderneming(en) investeren in het project?

OCAP: liquefier, CO2-pijpleiding AEB-OCAP, een compleet minigrid voor Alton, een centrale opslagtank, verdamper en CO2 afleverstations in het minigrid voor Grootslag.

ECW: het leidingennet in het minigrid Grootslag (geen onderdeel van de subsidieaanvraag).

- Wat is de locatie? Lay-out aanleveren

De locatie voor de vloeistofmaker en de minigrids is weergegeven in onderstaand overzicht.



[redacted]

[redacted]

- Welke andere ondernemingen doen noodzakelijke investeringen buiten het subsidiabele project om, die nodig zijn om CO2 van uitstoot naar consumptie te krijgen?

[redacted]

- Welke onderneming(en) is/zijn eigenaar van de CO2 bron

Shell Nederland Raffinaderijen B.V. en Alco Energy Rotterdam B.V.

- Technisch-inhoudelijke beschrijving van de CO2 bron

Shell: waterstofplant

Alco: bioethanolplant

- Zijn er andere subsidies ontvangen?

Nee

- Levert CO2-uitkoppeling nog andere voordelen op?

Nee

- Marktanalyse: vraag naar CO2, prognose levering en omzet

[redacted]

	2018	2020	2022	2024	2026	2028	2030
Agriport Grootslag Alton Jaarvraag (kton/jr)	[redacted]						

- Prijsvorming en prijzen inkoop, transport en distributie (verkoopprijs) CO2.

[redacted]

- Aan welke onderneming(en) wordt geleverd?

[redacted]

- Zijn dit bestaande ondernemingen? Moeten ze zich nog vestigen?

[redacted]

- Op welke wijze ontstaat er een milieuvoordeel als gevolg van dit project?

Normaal gesproken levert OCAP CO2 om de 'zomerstook' te vermijden. In de gebieden Agriport, Grootslag en Alton is externe CO2-levering echter nu al een belangrijke randvoorwaarde voor de inzet van de duurzame warmte die daar al wordt ingezet of komende twee jaar wordt gerealiseerd. De besparing in aardgasverbruik en CO2-emissie loopt daarmee verder op dan alleen het vermijden van de traditionele 'zomerstook' en is in feite 1-op-1. Als duurzame warmte voldoende beschikbaar is om de warmtevraag te dekken op momente van CO2-vraag en er is geen extern CO2 alternatief, dan zal de kweker alsnog aardgas stoken om in zijn CO2-vraag te voorzien. Deze vermeden aardgasstook bedraagt ca. 73 mln m3 per jaar wat overeenkomst met een vermeden CO2-emissie van 130 kton (gelijk aan de geleverde hoeveelheid CO2).

- Hoe groot is dit milieuvoordeel op jaarbasis?

Zie boven

- Op basis van welk intern criterium wordt besloten dat het project wordt gerealiseerd/de investering wordt gepleegd.

Het moederbedrijf van OCAP, Linde Gas Benelux B.V. hanteert een rendementseis van [redacted]% (voor belasting) voor dergelijke investeringen. Het geprognosticeerde rendement van deze business case bedraagt [redacted]% met subsidie en [redacted]% zonder de gevraagde subsidie (zie cashflow model).

- Cashflowmodel ex rente, afschrijvingen en interne doorbelastingen, met en zonder subsidie.

Zie separate pdf & excel cashflow model

- Risicoparagraaf.

Verkoop

De interesse voor afname van externe CO_2 nu en in de toekomst is afhankelijk van veel factoren: de gasprijs, de elektriciteitsprijs, de eventuele impact van emissierechten, ontwikkeling van duurzame warmte en de gesloten kas ten opzichte van WKK met rookgasreiniging, ontwikkelingen in wet- en regelgeving (zoals de aanscherping van de NO_x-eis zodat WKK zonder rookgasreiniging maar met externe CO_2 in nieuwe situaties niet langer mogelijk is), etc. Om deze onzekerheid zoveel mogelijk te beheersen, wordt gewerkt met vaste afspraken voor een langere tijd. Binnen die afspraken zit echter altijd een stuk flexibiliteit voor de kweker om te anticiperen op ontwikkelingen. Een belangrijke onzekerheid blijft daarmee bij OCAP liggen.

Inkoop

[redacted]

Investeringsrisico's

De kosten voor realisatie en aanleg van de transportleiding en het distributienetwerk zijn geraamd met een nauwkeurigheid van [redacted] %. De belangrijkste risico's in de realisatiefase betreffen daarnaast de doorlooptijd in het verkrijgen van vergunningen en wijzigingen in bestemmingsplannen.

Van: [redacted]
Aan: [redacted]
Cc: [redacted] ,Subsidia, [redacted]
Onderwerp: Re: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a.s.
Datum: dinsdag 8 mei 2018 16:16:57
Bijlagen: OCAP-RA-20180508 Aanvraag investeringssubsidie OCAP CO2 in De Kwakel 2e concept.pdf
OCAP-MD-20180508 Financieel model OCAP CO2 levering in De Kwakel.pdf

---

Beste [redacted]
Bijgaand een update van de aanvraag mbt "OCAP CO2 levering in De Kwakel" naar aanleiding van ons gesprek een aantal weken geleden en tevens de cashflow overzichten met/zonder subsidie in pdf Volgens mij geeft het document de beschrijving op de gevraagde punten Als er nog wat mist, dan hoor ik dat graag!
Met vriendelijke groet,
[redacted]
OCAP CO2 BV

Van: '[redacted])"
Datum: donderdag 26 april 2018 om 17:34
Aan: [redacted]@hvcgroep.nl'" [redacted]
CC: [redacted] | Subsidia , [redacted]
Onderwerp: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a s.

Caution: The identity of the sender of this message could not be verified as it originates from the Internet Please pay attention!

Beste [redacted],
De provincie Noord-Holland maakt zich op voor de Europese staatssteuntoetsen van vier projecten:

- OCAP De Kwakel
- OCAP vervloeien bij AEB en lokale infrastructuur bij Alton en Het Grootslag
- HVC Middenmeer
- Meerlanden Haarlemmermeer

Dat vraagt van de provincie maar zeker ook van jullie een enorme inzet om ervoor te zorgen eind dit jaar een evt. subsidiebeschikking te kunnen afgeven.
Wij hebben daarom [redacted] van Subsidia gevraagd ons te ondersteunen bij dit proces.
NB De HVC en Meerlanden projecten zien wij als twee losse subsidieaanvragen. Beiden moeten dus apart een projectplan indienen. Simpele reden daarvoor is dat er twee projecteigenaren zijn die afzonderlijk verantwoordelijkheid dragen voor de projectresultaten.
Gewenste planning (we hebben geen invloed op de planning van de Europese Commissie)
Om aan te geven wat de strakke planning is heb ik hieronder een tijdbalk opgenomen. Deze geeft de deadlines aan in 2018. Een race tegen de klok dus, met hollen en stilstaan.

jan	feb	mrt	apr	mei	juni	juli	aug	sept	okt	nov	dec
Motie 110 GS	Gesprekken met initiatiefnemers opstarten	Inzet motie 110 PS	Projectplannen concretiseren + 100% commitment alle partijen	8 mei: Projectplannen liggen klaar voor staatststeunanalyse *(plannen kunnen hierna niet meer aangepast worden, dus definitieve verhaal+begroting)* PNH Zomernota + buiten UVR	1 juni: prenotificering EU vier projecten Alle dossiers compleet aanleveren bij BZK (SAN)	Begin juli vragen vanuit BZK beantwoorden Eind juli: hopelijk besluit BZK om te notificeren	Reces EU	Begin sept: notificeren (minimaal 2 maanden)	Eind okt uitspraak EU over staatsteuntoets	Begin nov beschikking afd Subsidies Dat kan alleen omdat de provinciale subsidiemedewerkers en hun collega s hiervoor op voorhand tijd reserveren en voorwerk hebben kunnen doen	5 dec provinciale afsluiting begrotingsjaar 2018

In deze periode van april tot 8 mei a.s. moeten de vier projectplannen worden geconcretiseerd naar de **100% versies**. Precies in de meivakantie, dat realiseren we ons, maar gelukkig is de meeste informatie al wel beschikbaar. Voor Mark is een paar dagen later ook niet onoverkomelijk, maar dan graag wel in afstemming met hem. Een 100% versie betekent inhoudelijk dat op onderstaande vragen/onderwerpen in het projectplan wordt ingegaan (zie opsomming puntenlijst projectplannen). **Graag jullie inzet en check daarop.** Immers hoe beter het projectplan/business case is, des te meer kans er is op een positieve uitslag vanuit de EU. Het moet een plan zijn waar de projecteigenaar comfort bij heeft en bedenk dat de beoordelaars allergisch zijn voor tussentijdse wijzigingen.
Als het niet lukt om de projecten op 8 mei a.s. in de 100% versie te hebben moeten we helaas samen constateren dat de uitvoeringsgereedheid van het project te rooskleurig is ingeschat. We nemen dat project dan niet mee in dit traject. In overleg met de initiatiefnemer wordt dan afgestemd of uitstel of afstel aan de orde is.
Puntenlijst projectplannen:

- Technisch-inhoudelijke beschrijving van de investering op onderdelen
- Is dit een demonstratie van een nieuwe technologie? Zo ja, vloeit het dan voort uit R&D-werkzaamheden van de aanvrager?
- Welke onderneming(en) investeren in het project?
- Wat is de locatie? Lay-out aanleveren
- Welke andere ondernemingen doen noodzakelijke investeringen buiten het subsidiabele project om, die nodig zijn om CO2 van uitstoot naar consumptie te krijgen?
- Welke onderneming(en) is/zijn eigenaar van de CO2 bron
- Technisch-inhoudelijke beschrijving van de CO2 bron
- Zijn er andere subsidies ontvangen?
- Levert CO2-uitkoppeling nog andere voordelen op?
- Marktanalyse: vraag naar CO2, prognose levering en omzet
- Prijsvorming en prijzen inkoop, transport en distributie (verkoopprijs) CO2.
- Aan welke onderneming(en) wordt geleverd?
- Zijn dit bestaande ondernemingen? Moeten ze zich nog vestigen?
- Op welke wijze ontstaat er een milieuvoordeel als gevolg van dit project?
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vanuit BZK en EU willen we jullie daarom ook vragen stand-by te staan tijdens het EU traject om eventuele toelichtingen te geven in Den Haag of Brussel en schriftelijk vragen te beantwoorden. De coördinatie daarvan zal [redacted] ook op zich nemen.

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Met vriendelijke groeten, namens [redacted] en

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

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Datum	Kenmerk	Status
08-05-2018	OCAP-RA-20180508-JLi	2e concept

Business case

OCAP CO2 levering in De Kwakel

Aanvraag investeringssubsidie

Mei 2018

1 Inhoud

1	Inhoud	2
2	Subsidieverzoek	3
2.1	Duurzaamheidsambitie	3
2.2	Subsidieverzoek	3
2.3	Doel van dit document	3
2.4	Achtergrond bij het subsidieverzoek	3
3	Uitgangspunten	5
3.1	Huidige OCAP-levering	5
3.2	Uitbreiding CO2-aanbod Alco en mogelijke uitbreiding naar De Kwakel	5
4	Marktanalyse en verkoopprognose	6
4.1	Vraag naar CO2 in de glastuinbouw	6
4.2	OCAP propositie	7
4.3	Prognose levering en omzet OCAP CO2 in De Kwakel	7
5	Investering & exploitatie	9
5.1	Investeringen	9
5.2	Exploitatie	10
6	Financiering, rendement en investeringssubsidie	11
6.1	Rendementsprognose (zonder subsidie)	11
6.2	Rendementseis, onrendabele top en gevraagde subsidie	11
7	Risico's en gevoeligheidsanalyse	12
7.1	Exploitatierisico's	12
7.2	Investeringsrisico's	12
8	Planning	14
Bijlage 1 Cashflow overzicht		15

2 Subsidieverzoek

2.1 Duurzaamheidsambitie

OCAP heeft de ambitie om de levering van CO2 uit te breiden naar de glastuinbouw nabij De Kwakel, te ontwikkelen in de komende jaren tot en met 2020. Door de 'zomerstook' te vermijden kunnen de kwekers met de levering van OCAP CO2 een energiebesparing realiseren van ca. 21 miljoen kubieke meter aardgas. Hiermee wordt de uitstoot van ca. 37,5 kton CO2 vermeden. Daarnaast is externe CO2-levering een belangrijke randvoorwaarde voor de inzet van duurzame warmte (restwarmte, geothermie, warmte/koude opslag, etc.). De besparing in aardgasverbruik en CO2-emissie kan daarmee nog aanzienlijk verder oplopen. Indien er een oplossing gevonden wordt voor duurzame warmte, waarvoor een combinatie met een CO2 voorziening noodzakelijk is, zal er in totaal zelfs 42 miljoen kubieke meter gas worden bespaard. Dit staat gelijk aan een reductie van 75 kton in de uitstoot van CO2. Het beoogde resultaat van het project is dan ook een duurzame en betaalbare voorziening van CO2 voor De Kwakel om de duurzame ontwikkeling van het gebied te versnellen, de weg voor duurzame warmte vrij te maken en de concurrentiepositie te versterken.

2.2 Subsidieverzoek

Met een geprognosticeerd rendement van minder dan [redacted]% (voor belasting) ten opzichte van de rendementseis van [redacted]% (voor belasting) van het moederbedrijf van OCAP, Linde Gas, kent de business case voor de uitbreiding van de CO2 levering naar De Kwakel een substantiele onrendabele top. Met een investeringssubsidie is OCAP bereid en in staat het investerings- en exploitatierisico's te nemen die onvermijdelijk samenhangen met dit project en wordt een positieve investeringsbeslissing van moederbedrijf Linde Gas verwacht.

OCAP verzoekt daartoe de Provincie Noord-Holland tot toekenning van een investeringssubsidie van € 4,0 mln voor uitbreiding van de OCAP CO2 levering naar De Kwakel.

2.3 Doel van dit document

Dit document beschrijft de business case met de uitgangspunten en de randvoorwaarden waaronder de levering van externe CO_2 aan de glastuinbouw in De Kwakel voor OCAP haalbaar is als onderbouwing bij het subsidieverzoek.

2.4 Achtergrond bij het subsidieverzoek

Met de uitbreiding van de CO2 levering is een investering gemoeid van ca. € 26 mln omdat naast het netwerk ook een investering noodzakelijk is in een compressorstation bij CO2 toeleverancier Alco om daar extra CO2 aanbod in te kunnen nemen voor de levering aan de glastuinbouw in De Kwakel. Daarbij is een relatief lange transportleiding noodzakelijk, voortbouwend op de transportleiding naar PrimA4a, om De Kwakel te ontsluiten. De investering in de verbindende transportleiding bedraagt ongeveer € [redacted] mln.

OCAP werkt graag samen met de provincie Noord-Holland om dit gebied duurzaam en succesvol tot ontwikkeling te brengen. Voor deze investering is het voor OCAP noodzakelijk om de onrendabele top af te kunnen dekken. OCAP vraagt daarvoor een subsidie van € 4,0 mln. De subsidie dekt daarmee ca. 18% van de investering bij ontsluiting van de glastuinbouw in De Kwakel, nabij Aalsmeer. Vanuit deze basis kan de distributie-infrastructuur verder groeien naar de overige glastuinbouwgebieden in Aalsmeer, zoals de Legmeerpolder en Schinkelpolder, bij voldoende interesse in die gebieden en voldoende CO2 aanbod.

Met deze investeringssubsidie is OCAP in staat en bereid om de verdere investerings- en exploitatierisico's aan te gaan voor de uitbreiding naar De Kwakel en wordt een positieve investeringsbeslissing van haar moederbedrijf Linde Gas verwacht. Het verstrekken van de

gevraagde steun dekt de geprognosticeerde onrendabele top af, maar biedt geen dekking voor de financiele tegenvallers die kunnen ontstaan als deze risico's zich daadwerkelijk manifesteren. OCAP realiseert zich, en accepteert, dat deze risico's onvermijdelijk samenhangen met de aard van dit project, tot het ondernemersrisico behoren en niet kunnen worden afgewenteld op de overheid.

3 Uitgangspunten

3.1 Huidige OCAP-levering

OCAP betrekt op dit moment CO_2 van de raffinaderij van Shell in Pernis en van de bioethanolfabriek van Alco Energy Rotterdam. De CO2 wordt geleverd aan de glastuinbouw in het Westland, het Oostland (Pijnacker, Lansingerland) en de Zuidplaspolder. De uitbreiding naar PrimA4a is in voorbereiding voor start realisatie in het najaar van 2018. Nagenoeg alle CO_2 die bij deze bronnen in het CO_2-seizoen op dit moment beschikbaar is, wordt geleverd in deze gebieden. Het bestaande netwerk en de aangesloten gebieden zijn in groen aangegeven in onderstaand overzicht.

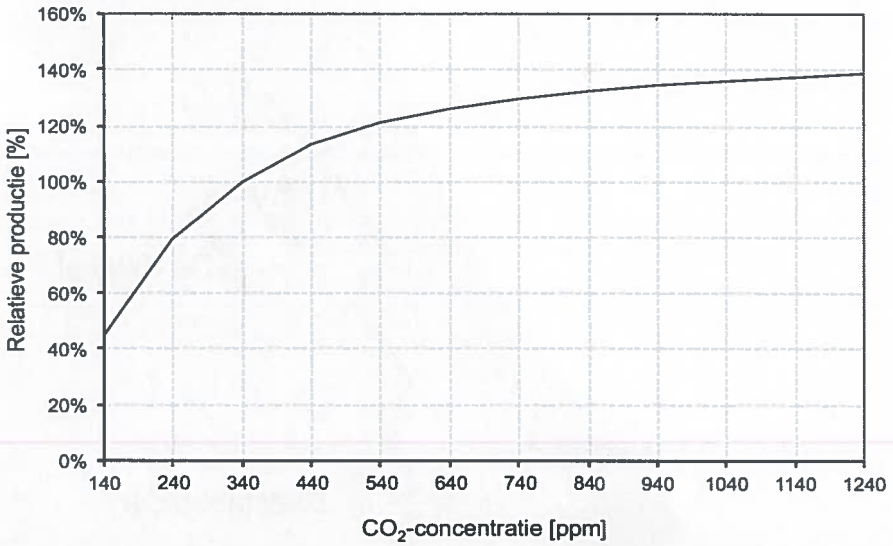
3.2 Uitbreiding CO2-aanbod Alco en mogelijke uitbreiding naar De Kwakel

OCAP heeft zich in de Green Deal "CO2 voorziening glastuinbouw Noord-Holland" onder meer verbonden om de mogelijkheid voor levering van CO_2 in Aalsmeer te onderzoeken als onderdeel en randvoorwaarde van een duurzame invulling van de glastuinbouw in de Provincie Noord-Holland.

[redacted] Daarvoor moet enerzijds een nieuw compressorstation bij Alco worden gerealiseerd (rode cirkel in bovenstaand figuur). Anderzijds moet de transportinfrastructuur verlengd worden vanaf de transportleiding die gerealiseerd wordt voor PrimA4a en moet er een distributienet worden aangelegd om de kwekers in De Kwakel aan te kunnen sluiten.

4.1 Vraag naar CO2 in de glastuinbouw

CO2 is noodzakelijk voor de groei van planten en een belangrijke productiefactor in de glastuinbouw. [redacted]



[redacted]

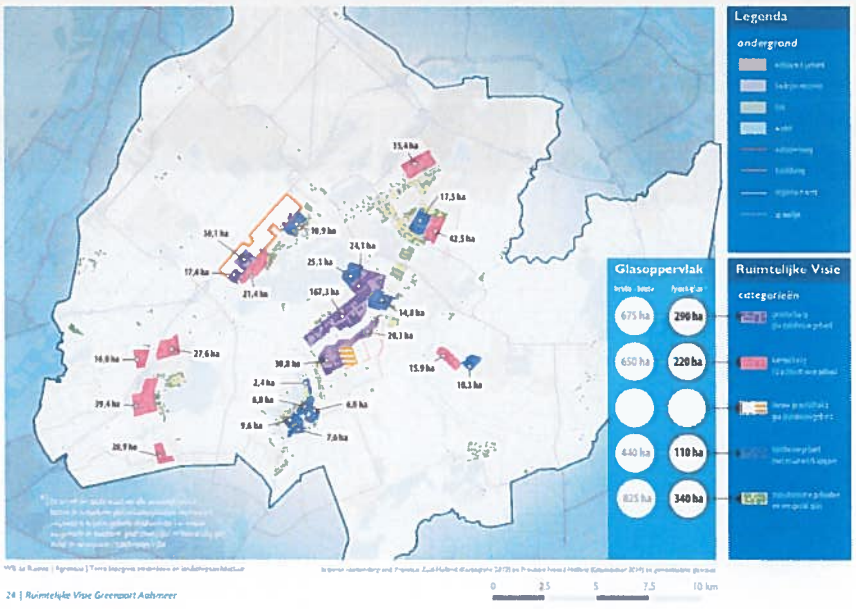
4.2 OCAP propositie

[redacted]

	CO2 kosten [€/ton]
[redacted]	[redacted]

4.3 Prognose levering en omzet OCAP CO2 in De Kwakel

[redacted]



Grootschalige glastuinbouw De Kwakel, Kudelstaart, Nieuwveen

[redacted]

Er wordt aangenomen dat de nieuwe glastuinbouw een mix zal zijn van voornamelijk snijbloemen en potplantenkwekers, en in mindere mate groentekwekers. Op grond van ervaring wordt ingeschat dat zeker ca. [redacted]% interesse zal hebben in externe CO_2 van OCAP met een gemiddelde vraag van tenminste [redacted] uur per ha en ca. [redacted] ton per ha per jaar. Totaal wordt zo een levering van ca. [redacted] ton per uur en ca. [redacted] kton verwacht, groeiend naar ca. [redacted] kton bij verduurzaming en ontsluiting van de eventuele nieuwbouw in Nieuw Amstel Oost.

[redacted]

Kleinschalige glastuinbouw Legmeerpolder en Schinkelpolder

[redacted]

Omzetprognose

[redacted]

5 Investering & exploitatie

5.1 Investeringen

Voor de levering van externe CO_2 aan de glastuinbouw nabij De Kwakel zijn de volgende investeringen noodzakelijk.

Investering	
Compressorstation bij Alco Transportleiding naar De Kwakel Reduceerstation Distributienet Aansluitingen (75x) Project management & engineering	[redacted]
Totaal investering	**€ 27,23 mio**

[redacted]

De nieuwe transportleiding moet tevens geschikt zijn voor toekomstige levering aan de Legmeerpolder, Schinkelpolder en eventueel nieuwe glastuinbouw in Nieuw Amstel Oost. Voor deze transportleiding zijn twee alternatieven in onderzoek.

[redacted]

De investeringsbegroting heeft een nauwkeurigheid van +/- [redacted]% (prijspeil 2018) en is gebaseerd op een raming van het engineeringbureau Atron. Het leidingtracé wordt op dit moment verder uitgewerkt door het engineeringsbureau in overleg met belanghebbenden, zoals de gemeente, het waterschap en grondeigenaren.

5.2 Exploitatie

De volgende jaarlijkse exploitatiekosten worden voorzien (eveneens prijspeil 2018) voor exploitatie van de CO2-levering aan de huidige glastuinbouw en bij het volgroeide gebied:

Winst en verlies	
Verkoop	[redacted]
Inkoop Alco	
Bruto marge	
Elektriciteit & utilities	
Bediening, beheer & onderhoud	
Verzekeringen, land lease, precario	
EBITDA	

De kosten voor inkoop zijn het resultaat van onderhandelingen met Alco.

De kosten van elektriciteit zijn ingeschat op basis van een gemiddelde commodityprijs van [redacted] per MWh (excl. transportkosten en energiebelasting). De kosten voor bediening, beheer en onderhoud zijn ingeschat op basis van ervaringen met vergelijkbare projecten en installaties. De kosten voor overhead en overige kosten zijn bepaald op basis van ervaring met het huidige project.

6 Financiering, rendement en investeringssubsidie

6.1 Rendementsprognose (zonder subsidie)

Zonder subsidie bedraagt het rendement van de business case ca. [redacted]% (voor belasting) De business case voor de uitbreiding van de CO2 levering naar De Kwakel heeft daarmee een onrendabele top.

6.2 Rendementseis, onrendabele top en gevraagde subsidie

[redacted]

Voor het afdekken van de onrendabele top wordt een investeringssubsidie gevraagd van € 4,0 mln. De subsidie dekt daarmee ca. 15% van de investering voor ontsluiting van de huidige glastuinbouw.

[redacted]

Rendement & onrendabele top	
Verkoop	[redacted]
Investering	€ 27,2 mio
Gevraagde subsidie	€ 4,0 mio
Subsidie t.o.v. investering	15%
IRR zonder subsidie (voor belasting)	[redacted]
IRR met subsidie (voor belasting)	[redacted]

Een samenvatting is gegeven in bovenstaande tabel met daarin de gevraagde investeringssubsidie voor de rendementseis van [redacted]% (voor belasting). Zonder het afdekken van de onrendabele top bedraagt het rendement [redacted] (voor belasting).

7 Risico's en gevoeligheidsanalyse

7.1 Exploitatierisico's

De belangrijkste exploitatierisico's betreffen de verkoop en de inkoop van de CO_2:

- **Verkoop**

de verkoop kent een aantal onzekerheden:

- De toekomstbestendigheid van het glastuinbouwgebied is onzeker. Het gebied kent relatief veel 'verouderd glas'. Het gebied is naar de toekomst toe bevestigd voor glastuinbouw, maar een daadwerkelijke vernieuwing is noodzakelijk voor voldoende interesse en afname van CO2 over de looptijd van de business case.
- De toekomstige afname van externe CO_2 in het nieuwe gebied zal sterk afhangen van de energieoplossing die gekozen wordt en de verduurzaming daarvan. Op dit moment wordt veel WKK met rookgasreiniging toegepast, met weliswaar behoefte aan externe CO_2 voor vermijding van de zomerstook en voor flexibiliteit, maar de hoeveelheden liggen substantieel lager dan bij toepassing van duurzame energie. In de vraagprognose is aangenomen dat verduurzaming ook in dit gebied de komende jaren zal plaats vinden. Ontwikkelingen hiertoe komen op gang maar concrete projecten zijn nog niet gestart.
- De interesse voor afname van externe CO_2 nu en in de toekomst is afhankelijk van veel factoren: de gasprijs, de elektriciteitsprijs, de eventuele impact van emissierechten, ontwikkeling van duurzame warmte en de gesloten kas ten opzichte van WKK met rookgasreiniging, ontwikkelingen in wet- en regelgeving (zoals de aanscherping van de NO_x-eis zodat WKK zonder rookgasreiniging maar met externe CO_2 in nieuwe situaties niet langer mogelijk is), etc. Om deze onzekerheid zoveel mogelijk te beheersen, wordt gewerkt met vaste afspraken voor een langere tijd. Binnen die afspraken zit echter altijd een stuk flexibiliteit voor de kweker om te anticiperen op ontwikkelingen. Een belangrijke onzekerheid blijft daarmee bij OCAP liggen.

- **Inkoop**

[redacted]

Naast bovengenoemde exploitatierisico's kent het project onzekerheden op de energiekosten, die zoveel mogelijk worden afgedekt met een indexatie op de verkoopprijs. Tenslotte kan veranderende wet- en regelgeving van invloed zijn op de beheer- en onderhoudskosten.

7.2 Investeringsrisico's

De kosten voor realisatie en aanleg van de transportleiding en het distributienetwerk voor De Kwakel zijn geraamd met een nauwkeurigheid van [redacted]%. De belangrijkst risico's in de realisatiefase betreffen daarnaast de doorlooptijd in het verkrijgen van vergunningen en wijzigingen in bestemmingsplannen. De consequenties daarvan worden op dit moment in beeld gebracht in een tracé studie. Deze studie wordt naar verwachting in juni afgerond. In juni moet

ook het ontwerp van het nieuwe compressorstation bij Alco gereed zijn. Op dat moment kan de nauwkeurigheid van de kostenbegroting worden verlaagd naar XX%

8 Planning

De volgende planning wordt voorzien om te komen tot start levering van de OCAP CO2 in De Kwakel in april 2020.

Activiteit	Datum
Detaillering business case	01-05-18
Definitieve subsidieaanvraag	01-05-18
Afronding trace studie	15-06-18
Afronding ontwerp compressorstation	15-06-18
Definitief investeringsbesluit Linde Gas	15-10-18
Bestemmingsplan, vergunning, zakelijk recht gereed	01-01-19
Detailengineering gereed	01-01-19
Start uitvoering	01-01-19
Start levering	01-04-20

Bijlage 1 Cashflow overzicht

Van: [redacted] | Subsidia
Aan: [redacted]
Cc: [redacted]
Onderwerp: RE: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a.s.
Datum: woensdag 9 mei 2018 11:22:03

Beste allen,
Ik heb vandaag [redacted] van BZK gesproken Hij gaat volgende week contact opnemen met de Commissie om de vraag te bespreken of er 1 of 4 prenotificatiedossiers moeten komen
Tevens heb ik met hem afgesproken dat hij vrijdag 25 mei het definitieve concept/de definitieve concepten van de PN-dossiers van mij krijgt Deze zal ik op die dag ook ter commentaar aan jullie voorleggen
[redacted]: we zouden op die dag ook de SANI-formulieren in concept kunnen invullen; past dat in jouw agenda?
Tevens hebben jullie gezien dat ik vandaag de potentieel begunstigden nog om aanvullende gegevens heb gevraagd
Ik ben niet ingegaan op de begrotingsposten "onvoorzien" in de aanvragen van HVC en Meerlanden, maar duidelijk moge zijn voor eenieder dat dergelijke posten niet in een PN-dossier mogen voorkomen [redacted] en [redacted]: willen jullie ze vragen deze posten te integreren/elimineren in de begrotingen, of willen jullie dat ik deze vraag aan ze stel?
Even tot zover,
Met vriendelijke groet,
[redacted]
Subsidia - Postbus 68 - 7620 AB - BORNE
Tel + 31 (0[redacted]
[redacted] - LinkedIn

Van: [redacted]
Verzonden: donderdag 26 april 2018 17:35
Aan: [redacted]@ocap nl' ; [redacted]@hvcgroep nl' [redacted]@meerlanden nl
CC: [redacted] | Subsidia ; [redacted]
Onderwerp: Toelichting en afstemming staatssteuntraject CO2 projecten Noord-Holland: deadline concretiseren projectplannen 8 mei a s
Urgentie: Hoog
Beste [redacted],
De provincie Noord-Holland maakt zich op voor de Europese staatssteuntoetsen van vier projecten:

- OCAP De Kwakel
- OCAP vervloeien bij AEB en lokale infrastructuur bij Alton en Het Grootslag
- HVC Middenmeer
- Meerlanden Haarlemmermeer

Dat vraagt van de provincie maar zeker ook van jullie een enorme inzet om ervoor te zorgen eind dit jaar een evt. subsidiebeschikking te kunnen afgeven.
Wij hebben daarom [redacted] van Subsidia gevraagd ons te ondersteunen bij dit proces.
NB De HVC en Meerlanden projecten zien wij als twee losse subsidieaanvragen. Beiden moeten dus apart een projectplan indienen. Simpele reden daarvoor is dat er twee projecteigenaren zijn die afzonderlijk verantwoordelijkheid dragen voor de projectresultaten.
Gewenste planning (we hebben geen invloed op de planning van de Europese Commissie)
Om aan te geven wat de strakke planning is heb ik hieronder een tijdbalk opgenomen. Deze geeft de deadlines aan in 2018. Een race tegen de klok dus, met hollen en stilstaan.

jan	feb	mrt	apr	mei	juni	juli	aug	sept	okt	nov	dec
Motie 110 GS	Gesprekken met initiatiefnemers opstarten	Inzet motie 110 PS	Projectplannen concretiseren + 100% commitment alle partijen	8 mei: Projectplannen liggen klaar voor staatststeunanalyse *(plannen kunnen hierna niet meer aangepast worden, dus definitieve verhaal+begroting)* PNH Zomernota + buiten UVR	1 juni: prenotificering EU vier projecten Alle dossiers compleet aanleveren bij BZK (SAN)	Begin juli vragen vanuit BZK beantwoorden Eind juli: hopelijk besluit BZK om te notificeren	Reces EU	Begin sept: notificeren (minimaal 2 maanden)	Eind okt uitspraak EU over staatsteuntoets	Begin nov beschikking afd Subsidies Dat kan alleen omdat de provinciale subsidiemedewerkers en hun collega s hiervoor op voorhand tijd reserveren en voorwerk hebben kunnen doen	5 dec provinciale afsluiting begrotingsjaar 2018

In deze periode van april tot 8 mei a.s. moeten de vier projectplannen worden geconcretiseerd naar de **100% versies**. Precies in de meivakantie, dat realiseren we ons, maar gelukkig is de meeste informatie al wel beschikbaar. Voor Mark is een paar dagen later ook niet onoverkomelijk, maar dan graag wel in afstemming met hem. Een 100% versie betekent inhoudelijk dat op onderstaande vragen/onderwerpen in het projectplan wordt ingegaan (zie opsomming puntenlijst projectplannen). **Graag jullie inzet en check daarop.** Immers hoe beter het projectplan/business case is, des te meer kans er is op een positieve uitslag vanuit de EU. Het moet een plan zijn waar de projecteigenaar comfort bij heeft en bedenk dat de beoordelaars allergisch zijn voor tussentijdse wijzigingen.
Als het niet lukt om de projecten op 8 mei a.s. in de 100% versie te hebben moeten we helaas samen constateren dat de uitvoeringsgereedheid van het project te rooskleurig is ingeschat. We nemen dat project dan niet mee in dit traject. In overleg met de initiatiefnemer wordt dan afgestemd of uitstel of afstel aan de orde is.
Puntenlijst projectplannen:

- Technisch-inhoudelijke beschrijving van de investering op onderdelen
- Is dit een demonstratie van een nieuwe technologie? Zo ja, vloeit het dan voort uit R&D-werkzaamheden van de aanvrager?
- Welke onderneming(en) investeren in het project?
- Wat is de locatie? Lay-out aanleveren
- Welke andere ondernemingen doen noodzakelijke investeringen buiten het subsidiabele project om, die nodig zijn om CO2 van uitstoot naar consumptie te krijgen?
- Welke onderneming(en) is/zijn eigenaar van de CO2 bron
- Technisch-inhoudelijke beschrijving van de CO2 bron
- Zijn er andere subsidies ontvangen?
- Levert CO2-uitkoppeling nog andere voordelen op?
- Marktanalyse: vraag naar CO2, prognose levering en omzet
- Prijsvorming en prijzen inkoop, transport en distributie (verkoopprijs) CO2.
- Aan welke onderneming(en) wordt geleverd?
- Zijn dit bestaande ondernemingen? Moeten ze zich nog vestigen?
- Op welke wijze ontstaat er een milieuvoordeel als gevolg van dit project?
- Hoe groot is dit milieuvoordeel op jaarbasis?
- Op basis van welk intern criterium wordt besloten dat het project wordt gerealiseerd/de investering wordt gepleegd.
- Cashflowmodel ex rente, afschrijvingen en interne doorbelastingen, met en zonder subsidie.
- Risicoparagraaf.

Als jullie over bovenstaande puntenlijst nog een nadere toelichting willen hebben kunnen jullie terecht bij Mark Strootman (Subsidia - Tel + 31 (0)6 46 10 34 92).

Maar [redacted] gaat dus niet de projectplannen schrijven, hij kan wel tegenlezen en goede aanwijzingen geven voor verbetering.

Voor het opstellen van de staatsteunanalyses van de vier projecten en de beleidsmatige onderbouwing daarvan staat de periode van **8 mei t/m 1 juni.** Daarna start het EU traject, inhoudelijk gaan we dan ook niets meer aanpassen in de projectplannen. We zetten juist in op versnelling richting de notificatie. Voor vragen vanuit BZK en EU willen we jullie daarom ook vragen stand-by te staan tijdens het EU traject om eventuele toelichtingen te geven in Den Haag of Brussel en schriftelijk vragen te beantwoorden. De coördinatie daarvan zal [redacted] ook op zich nemen.

Subsidiebeschikking Noord-Holland
Voorsorterend op het soepel opstellen van de provinciale subsidiebeschikking dit jaar, kan uiterlijk in oktober 2018 de formele subsidieaanvraag ingediend worden, voorafgaand aan opstellen en routing beschikking in november. De subsidieaanvraag bestaat uit:
- Aanvraagformulier subsidie; ondertekend en met aangegeven verplichte bijlagen.
- Projectinformatie (formulier) bij subsidieaanvraag.
- Bijlagen o.a. Begroting project, Financieringsplan en Planning (zie hierboven).

We zien uit naar een fijne samenwerking de komende maanden en hopen op een gunstige beoordeling van de projecten.

[redacted] en ik zijn uiteraard ook voor jullie beschikbaar voor vragen of om mee te sparren.

Met vriendelijke groeten, namens [redacted] en

[redacted]

Beleidsmedewerker landbouw – Regionale Economie en Erfgoed

T (023) [redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted] @noord-holland.nl

Van: [redacted]
Aan: [redacted] | Subsidia"
Cc: [redacted]

Onderwerp: RE: Tekst CO2 steun Noord-Holland
Datum: maandag 14 mei 2018 17:21:20

Dag [redacted],
Dank voor deze omschrijving. De vraag of de onderstaande projecten in één prenotificatie kunnen worden gebundeld, of afzonderlijk moeten worden gemeld, heb ik voorgelegd aan de collega's bij DG COMP.
Ik houd je op de hoogte.
Vriendelijke groeten,
[redacted]

Van: [redacted] | Subsidia
Verzonden: zaterdag 12 mei 2018 12:14
Aan: [redacted]
CC: [redacted]

Onderwerp: Tekst CO2 steun Noord-Holland
Beste [redacted],
Zoals vorige week besproken, mail ik je hierbij een korte tekst over de 4 ad-hoc steunmaatregelen:
===
The Dutch authorities will grant:

1. EUR 3 million for the construction by OCAP CO2 BV of an infrastructure for the off-take of waste CO2 from an existing bioethanol plant and delivery of this CO2 to greenhouses.
   The project requires an investment in compression and infrastructure of EUR 27 million by OCAP CO2 BV which is found to be economically not feasible without investment aid.
2. EUR 4 million for the construction by OCAP CO2 BV of an infrastructure for the delivery of waste CO2 to greenhouses.
   The project requires an investment in liquefaction of CO2 and infrastructure of EUR 28 million by OCAP CO2 BV which is found to be economically not feasible without investment aid.
3. EUR 0.75 million for the construction by HVC of an infrastructure for the delivery of waste CO2 to greenhouses.
   The project requires an investment in capturing CO2 from a biomass digester and infrastructure of EUR 1.5 million by HVC which is found to be economically not feasible without investment aid.
4. EUR 0.75 million for the construction by Meerlanden of an infrastructure for the delivery of waste CO2 to greenhouses.
   The project requires an investment in capturing CO2 from a biomass digester and infrastructure of EUR 1.5 million by Meerlanden which is found to be economically not feasible without investment aid.

These abovementioned projects are 4 independent business cases at 4 different locations and involve 4 independent ad-hoc aid measures.
The CO2 will be used by third parties (growers) to enhance crop growth instead of using (the CO2 in) flue gases by burning natural gas. The environmental effect of the aid will be realised by the change in behaviour of the greenhouses using CO2 from these projects instead of the use of natural gas to produce their own CO2, thus leading to primary energy savings on the part of the end consumers which should in turn reduce CO2 emissions thus contributing to environmental protection.

====

Is dit voldoende voor je contact met de Commissie?

Met vriendelijke groet,

[redacted]

Subsidia - Postbus 68 - 7620 AB - BORNE

Tel + [redacted]

[redacted] - LinkedIn

Preliminary questions

All cases

1. For each project, please provide a breakdown of what has been included in the operating costs and benefits set out in the Excel spreadsheet.

Answer: see attachments. The business case for Meerlanden has been adjusted.

2. There is a large difference in the internal rates of return (IRR) required in the four projects, as well as the percentage of the funding gap the aid would cover. How were these figures calculated? In particular, considering that both HVC and Meerlanden are public waste management companies, whose shareholders are municipalities, why is there such a big difference between the IRRs they require (% for HVC, % for Meerlanden)? Why is HVC willing to accept a negative IRR?

Answer: the IRR of the projects were calculated pre-tax.
Since Linde Gas Benelux is a commercial company for which the transport and supply of CO2 is core-business, Linde Gas Benelux has set the % as a hurdle rate. The risk profile of the OCAP projects is higher than the HVC and Meerlanden projects. The nature of the business is that OCAP has to contract multiple clients and has to decide on the investment even when the total demand has not been contracted. The average contract period with clients for OCAP is limited to 5 years where as this for HVC and Meerlanden is 12 years, the lifetime of the investment.
HVC and Meerlanden are publicly-owned companies for which the supply of CO2 is a side business. The nature of the projects is that they have to contract only one client (OCAP for Meerlanden and ECW for HVC). This the reason why they can settle for a lower IRR.
HVC and Meerlanden are both independent organizations of each other and have their own management model, so that different decision-making criteria are used in the business cases. Meerlanden used the following for the determination of the IRR: WACC + additional risk of the CO2 project. The minimum IRR requirement for an approval decision is % for Meerlanden as CO2 supply is not a statutory task for municipalities and it is a risky activity.
HVC is currently executing several projects in the field of CO2 which are financially unprofitable and do not meet the hurdle rate of %. HVC started these projects because in the long-term emitting CO2 will not stand. Besides this, HVC wants to invest in gaining experience with CCU and CCS. The threshold for this kind of small scale investments is an IRR ≈ 0%. A precondition is that the income exceeds the OPEX.

3. We note that the investment depreciation period is indicated to be 15 years for the OCAP projects (SA.51335 and SA.51336), but 12 years for the HVC and Meerlanden projects (SA.51337 and SA.51338). What is the reason for this difference?

Answer: the depreciation period for transport pipelines for OCAP is standard set at 15 years. For Meerlanden the technical lifetime of the investment has been estimated at 12 years because of the wear of sensitive parts. In line with their experience with the gas treatment plant, this seems to be a reasonable time.
The depreciation period for the HVC project is set at 12 years, following the horizon of the SDE+ subsidy scheme in the Netherlands which is applicable to the sources of CO2.

4. Reference is made to an entity called ECW – please clarify the nature of this entity, and its role in relation to the distribution of CO_2 to greenhouses. Could ECW be considered to be in competition with OCAP or its suppliers?

Answer: ECW is a privately-owned grid company and is active in the transport of electricity, gas and heat in the areas AgriportA7 and Het Grootslag. ECW is not competing with market actors like OCAP and its suppliers. For ECW CO2 is an utility which enables optimizing the geothermal

wells. When CO2 is available there is less need for growers to activate CHP's and therefore geothermal heat supply can be maximized.
ECW will invest in a CO2 grid at Het Grootslag as a small part of the total investment by ECW in geothermal energy supply. The CO2 pipelines can be jointly realized with the heat pipelines. The investment by ECW in CO2 pipelines is no part of the scope of the projects SA.51335, SA.51336, SA.51337 and SA.51338.

5. It is stated that the main competitors in the market are suppliers of liquid CO_2, and that it is impossible to define a market for the supply of gaseous CO_2, other than that supplied by OCAP in other greenhouse areas. In the context of case SA.48816, however, it was noted that Warmco in Zeeland and Made in Gederland offer similar CO_2 supply services in other regions. It is also stated that OCAP's shareholder, Linde Gas Benelux B.V., is active on a competitive market. Are there, therefore, other undertakings supplying gaseous CO_2, albeit in different geographic areas?

Answer: the supply of gaseous CO2 through pipelines is by definition bound to the location of the pipelines and therefore local by nature. Warmco in Zeeland (Yara and Zeeland Seaports) and Made in Gelderland (Essent) are only active in the local areas they supply. The geographical market is restricted to the greenhouse areas in the Netherlands. We do not foresee other sectors or users that might be users in the future.
Considering the structure of the market, the limited availability of sources, transport facilities (pipelines and compression equipment) as well as the substantial investments required for entrance to the market it is not expected that competitors would enter this within the foreseeable future. There are indirect competitors who deliver liquid CO2 by truck. However, costs for liquid CO2 are higher compared to gaseous CO2 delivered by pipeline.
OCAP is mainly competing against natural gas suppliers (as source of CO2 from flue gas) and not against liquid CO2 suppliers.

6. Are the greenhouses to be supplied following the projects already built and operational? If not, when is it envisaged that they will be? If a portion of them are already in place, approximately what percentage of them remains to be built? The information provided can be very high level.

Answer: the majority of the greenhouses in the areas within Greenport Aalsmeer and Greenport Noord-Holland Noord is already built. The development of new greenhouses depends on the availability of land, economic developments and individual investment decisions. Therefore, the figures below are estimates.

Greenport Aalsmeer:

- ***De Kwakel*: 170 hectares existing.**

Greenport Noord-Holland Noord:

- ***AgriportA7*: 510 hectares existing and 90 hectares to be built.**
- ***Alton*: 115 hectares existing and 15 hectares to be built.**
- ***Het Grootslag*: 240 hectares existing.**

7. Are there any further projects concerning the supply of CO_2 to greenhouses, relating to the OCAP network, currently planned (whether or not they are intended to receive State aid)? If so, please provide a short description of those projects (the information provided can be very high level).

Answer: the major plan for OCAP is to extend the CO2 grid to the greenhouse area Tinte-Vierpolders in the province Zuid Holland. In addition, at the moment three feasibility studies are

being executed on capturing and using CO2 from the waste incinerators AEB and HVC in the province Noord-Holland and AVR in the province Zuid Holland. Results are expected early 2019.

SA.51335 (Aid to OCAP – Alton, AgriportA7, Grootslag)

8. Please clarify exactly what will be included within the scope of the project, in particular:
   - is the pipeline to be built only that part that will connect the existing pipeline at PrimA4a to AEB, or will it go beyond that?;

Answer: that is correct, it is the part that will connect the existing pipeline to the premises of AEB. For your information: the existing pipeline runs until the Port of Amsterdam.

   - is the liquefier already in place at AEB, or will that be built/installed as part of the project?; and

Answer: the liquefier is not already in place and as part of the project it will be built at AEB

   - are the "mini-grids" already in place at Alton, Agriport, and Grootslag, or will they be built as part of the project?

Answer: the mini grids are not already in place. The pipeline grids at Grootslag and Agriport are not included in the investment costs, since these are no OCAP investments. Part of the investment in the projects however, are central tanks and an evaporator for these locations. At Alton the grid, tanks and evaporator are part of the project.

9. We understand that, following this project, gaseous CO_2 will be pumped to AEB through the OCAP pipeline, then liquefied at AEB. It will then be driven, in liquid form, by truck, to Alton, Agriport, and Grootslag, where it will be re-evaporated and supplied to greenhouses via mini-grids in those areas. Is that correct? If so, please explain why you consider that operators who deliver liquid CO_2 by truck are not direct competitors of OCAP. What is to prevent OCAP from supplying the liquid CO_2 to other areas beyond the area of its pipeline network? This question is also relevant for SA.51337, if the captured CO_2 will be delivered by truck (see question 15).

Answer: this is correct. For your information: AEB is not an investor nor a beneficiary of the aid. OCAP will invest at the premises of AEB.
OCAP is competing against suppliers of natural gas. This is the nature of the business of OCAP and the reason why the system is designed this way. The gaseous CO2 OCAP supplies for the growers is a substitute for producing CO2 from exhaust gasses of their CHP during summertime. It is expected that a relatively small part (5-10%) of the total sales volume will substitute existing liquid CO2 supply and as such can be qualified as competing against liquid CO2.
The Dutch authorities will not prevent OCAP from supplying the liquid CO2 to other areas.

10. In the context of case SA.48816, the Commission reviewed the price that Shell and Alco receive for supplying CO_2, to ensure that they did not receive the benefit of the aid to OCAP. Is there any change to the prices in this case, or how they are calculated, that would require the Commission's previous analysis to be updated? This question is also relevant for SA.51336.

Answer: the contract between Shell and OCAP will be continued. At this time, it is not clear if this effects the price that Shell receives. The forecast of the business cases is based on the prices that Shell and Alco receive from the existing contracts.

11. Will AEB receive payment from OCAP for supplying CO_2? If so, what will be the amount of that payment, and how is it calculated? How will it be ensured that any such payment would not pass on the benefit of State aid to AEB?

Answer: see also the answer to question 9. AEB is not an investor nor a client. AEB has the intention to supply CO2 to OCAP from the waste incinerator in the future once the business case for that project has been proven to be feasible. This project is not part of the scope of SA.51335.

12. How does OCAP calculate the price it charges to greenhouses? Are you aware of the prices that Warmco in Zeeland and Made in Gederland, or other relevant competitors, charge for CO_2? If so, what are they? This question also applies to SA.51336.

Answer: In fact, we have made our calculations based on an average price of EUR [redacted]/t for the case SA.51335 and EUR [redacted]/t for SA.51336.

The cases you mention do not compete with OCAP. In the Netherlands only OCAP supplies gaseous CO2 to growers on such a scale. Therefore, no market price can be defined. The growers will pay a price per ton, which is lower than the price of liquid CO2 and which should also be competitive to the costs they have to make for producing CO2 by themselves. The sales prices for OCAP in general lie between [redacted] and [redacted] EUR/ton depending on the purchase volume. The more hours a certain installed capacity is used, the lower the (average) costs per supplied ton CO2 are. Prices are thus being set on contracted supply capacity and the actual full load off-take hours.
The higher the full load off-take hours, the lower the price the grower pays and vice versa.

The growers need to invest in the connection to the distribution network. They pay a connection fee to OCAP for their individual supply station and they need to invest in a connecting pipeline and associated valves, process equipment and automation to connect the supply station to their CO2 dosing system. The investments vary from grower to grower and depend largely on the size of the connection.

SA.51336 (Aid to OCAP – De Kwakel)

13. We note that the aid amount requested for this project is higher than that requested for the project in SA.51335, despite the fact that this project will result in fewer emissions savings and serve fewer hectares of greenhouses. In light of this, please explain why the aid requested for SA.51336 should be considered to be proportionate.

Answer: in our opinion proportionality means that the aid amount is limited to the minimum needed to incentivise the additional investment. This is primarily an economic assessment of the project. The aid amount is needed for the investor OCAP to meet the hurdle rate but does not exceed the needed amount.

It is correct that the initial forecasted emissions savings of SA.51335 are higher, but the long-term plans are to extend the greenhouse area De Kwakel in the Aalsmeer area. In that case it is possible to connect the greenhouses to the OCAP grid without providing OCAP with additional aid. As an effect this will lead to additional emissions savings.

14. When Alco increases its supply to OCAP in 2020, will this lead to a change in price it charges for the CO_2? If so, how will the new price be calculated, and how will it be ensured that the benefit of the aid is not passed on to Alco?

Answer: no, the increase of supply falls within the range of the actual contract between Alco and OCAP. The price per ton CO2 will not change.

SA.51337 (Aid to HVC for CO_2 capture and pipeline)

15. We understand that this project involves the installation of CO_2 capture technology at HVC. Will the captured CO_2 be supplied directly to greenhouses by HVC? If so, could it be considered to be in competition with OCAP? If not, will it be supplied to OCAP, or some other party? How will CO_2 captured by HVC physically be delivered to the greenhouses (e.g. by pipeline, truck, etc.)?

Answer: the captured CO_2 will be supplied to the gate of the site of Agriport to ECW. ECW is responsible for the distribution at Agriport to the greenhouses. The CO2 will be physically delivered by pipeline.
The CO2 is an alternative for burning natural gas, which is equal to the business of OCAP.
The composition of the CO2 gas of HVC differs slightly from the CO2 gas of OCAP, which requires an alternative way of feeding in of the CO2.
The total demand at Agriport is much bigger than the available CO2 production. The annual demand at this moment for CO2 at Agriport is 160.000 ton. The greenhouses produce 150.000 ton by themselves, by burning natural gas. The remaining 10.000 ton is supplied by ECW in liquid form. Because of the volume of the demand, we consider HVC and OCAP not as competitors.

16. The pre-notification states that the average sale price for CO_2 to greenhouses in this case is €[redacted]/ton. Will HVC receive this revenue from the greenhouses? If not, who will receive it, and will HVC receive any revenue for the supply of CO_2? If so, what amount will HVC receive?

Answer: HVC will sell the CO2 to ECW for an estimated price (used for the business case of HVC) of €[redacted]ton. ECW is the supplier of CO2 to the greenhouses. The price €[redacted]/ton is the total estimated sales price of ECW to the greenhouses.

17. Is HVC registered with the Emissions Trading Scheme? If so, are the installations for which the aid is requested neutral from an ETS perspective?

Answer: HVC is not registered with the Emissions Trading Scheme

SA.51338 (Aid to Meerlanden for CO_2 capture and pipeline)

18. The pre-notification states that Meerlanden will receive €[redacted]/ton from OCAP for the supply of CO_2. How is this price calculated, and how does it compare to the price OCAP pays to other CO_2 suppliers, e.g. Shell? The pre-notification (para.47) states that the most important obstacle for the realisation of the project is the low revenue for the beneficiary. Press reports indicate, however, that demand for CO_2 is higher than supply[1]. What is to prevent Meerlanden from raising the price in order to increase the revenue, so as to make the project profitable without State aid?

Answer: this price is a result of negotiations at arms' length. It is sufficient for Meerlanden to obtain an economically feasible project and it is the maximum OCAP is willing tot pay, since OCAP has to invest in a pipeline as well. Raising the price will lead to a no-go from OCAP.
The price is higher than the prices OCAP pays to other suppliers, since Meerlanden has to invest in CO2-capturing and because of the low volume of CO2 involved.
It is correct that demand for CO2 is higher than the available supply of gaseous CO2 from external sources, but growers still have the option of burning natural gas by themselves.

[1] https://www.ad.nl/westland/probleem-met-co2-hindert-duurzaamheid~a53d70de/
http://www.groentennieuws.nl/artikel/156987/OCAP-gaat-CO2-aan-westelijk-Westland-leveren

19. We note that OCAP will invest in a connecting pipeline to join Meerlanden to the existing network. Will OCAP receive any aid for investing in this pipeline?

Answer: no aid will be passed through to OCAP.

20. What are the "other costs" listed in the breakdown of the aid costs (page 4 of the pre-notification)?

Answer: these are costs for Project management and software solutions.

21. Is Meerlanden registered with the Emissions Trading Scheme? If so, are the installations for which the aid is requested neutral from an ETS perspective?

Answer: Meerlanden is not registered with the Emissions Trading Scheme.

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: RE: prenotificatie teksten
Datum: dinsdag 11 september 2018 12:14:16
Bijlagen: image001.jpg
image002.png
Prenotification State aid CO2project OCAP Liquefier_040618.pdf
State aid calculation OCAP_AEB_250518.pdf
Prenotification State aid CO2project OCAP Kwakel_040618.pdf
State aid calculation OCAP_Kwakel_250518.pdf

Hoi [redacted],

Zie bijgaand,

Groet,

[redacted]
Subsidia - Postbus 68 - 7620 AB - BORNE
Tel + [redacted]
[redacted] - LinkedIn

Van: [redacted]
Verzonden: dinsdag 11 september 2018 10:20
Aan: [redacted] | Subsidia
Onderwerp: prenotificatie teksten

Dag [redacted]

Ik heb in mijn archief niet de definitieve naar Brussel (via [redacted]) gestuurde prenotificatie teksten van de vier projecten. Ik heb alleen eerdere concepten.

Kun je mij die toesturen?

Vriendelijke groet,

[redacted]

Beleidsadviseur economie
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Prenotification of State aid to OCAP.

Project CO2-liquefier and mini grid Alton, AgriportA7 and Grootslag

Date: 04/06/2018

1. GENERAL

Description of the aid

1. The primary objective of the aid measure is to increase environmental protection in several horticultural areas in the province Noord-Holland (NL) by reducing the use of primary energy sources for conventional forms of CO2 generation for horticultural processes. This will be achieved by transporting CO2 from industrial sources and biomass digesters to growers with a CO2 demand. Investments in CO2 capturing and infrastructure are needed to realise this objective.

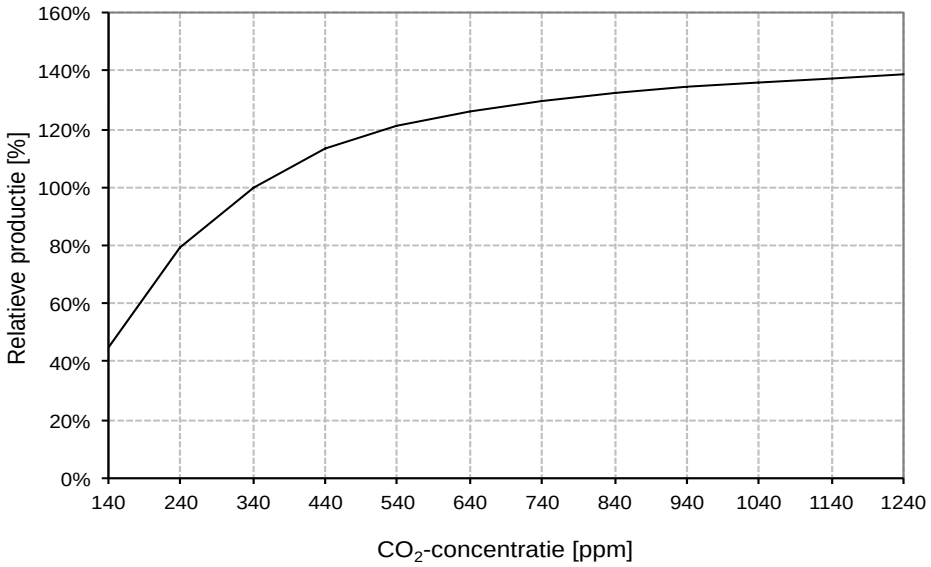
2. The Dutch authorities want to reduce CO2 emissions in order to increase environmental protection and reach its COP21 targets. The aim of this aid is to enable greenhouses to save on the use of natural gas by switching to industrial and biomass waste CO2. The Dutch authorities expect the measure to result in CO2 reductions with 130 kton per year.

3. The Dutch authorities will grant EUR 3 million for the construction by OCAP CO2 BV of an infrastructure for the off-take of waste CO2 from an existing bioethanol plant and refinery and delivery of this CO2 to greenhouses, where it is used to enhance crop growth instead of using (the CO2 in) flue gases by burning natural gas. The project requires an investment in compression and infrastructure of EUR 28 million by OCAP CO2 BV which is found to be economically not feasible without investment aid.

Description of the project

4. The Greenports Aalsmeer and Noord-Holland Noord are one of the largest horticultural centres in the Netherlands. The province of Noord Holland and the municipalities have set an agenda for the modernisation and restructuring of the Greenports. One of the main objectives is to provide for the establishment of sustainable conditions such as a CO2 and a heat network.

5. CO2 is necessary for the growth of plants and an important production factor in greenhouse horticulture. The higher the CO2 concentration in the air, the better the plants will grow. Improving plant growth translates in higher yields and efficient use of resources such as energy and space. The effect of the CO2 concentration on plant growth, and therefore production in the greenhouse, is shown in the graph below. Production in this graph is set at 100% at the CO2 concentration in the open air (approx. 340 ppm).



6. Most CO2 is needed in the summer when the plant grows best under the influence of the (sun) light. At that moment, "fresh" CO2 is supplied to the outside air by ventilation via the windows, which are then open in the greenhouse. However, this is insufficient to allow the plant to grow optimally. If CO2 is not actively dosed, the CO2 concentration drops to (far) below the external value of 340 ppm. In practice, examples are known in which the concentration falls back below 200 ppm. The plant then decelerates strongly in growth, as the graph shows, until the CO2 uptake by the plant is in equilibrium with the CO2 supplied by ventilation. The grower will actively dose extra CO2 to prevent a drop in the CO2 concentration and preferably achieve a concentration that is above the outside value. As soon as the concentration exceeds the external value, CO2 will be lost on balance through ventilation. The grower seeks the balance between extra growth and the costs of dosing extra CO2.

7. Traditionally, the grower uses the flue gases from his boiler or cogeneration plant to dose CO2. In the summer, the grower burns his boiler or cogeneration for this purpose, without the heat produced thereby being used; the "summer heating". This costs the grower money and burdens the environment. Sometimes liquid CO2 is also used, but due to the cost price this is mainly used in addition to or on top of the dosing of flue gases.

8. In the framework of the so called "Green Deal" between the Dutch national government and the Province of North-Holland and private companies amongst which HVC and OCAP CO2 BV, the intention to provide waste CO2 to greenhouses was expressed. A Green Deal is an informal public-private partnership in which parties express their intentions with regard to sustainable initiatives to remove certain barriers for these initiatives to be realised. In the Green Deal, these parties agreed to realize a source of high-quality CO2 (from flue gases) and a pipeline network for the distribution of CO2 to greenhouse horticulture companies in Noord-Holland with an economic return for the horticultural sector. The aforementioned parties work together and focus on fulfilling the conditions and the steps to be taken for both the CO2 transport network and the development of a way to filter out CO2 from flue gases.

9. In the official policy documents of the province Noord-Holland, the *Strategisch Beleidskader Economie Noord-Holland* (SBE) en *Uitvoeringsagenda Economie Noord-Holland* (UA) the policy on economic developments and the transition towards a circular and economy and a renewable energy supply are decided (vastgelegd).. For the horticultural sector the challenge is to switch form fossil fuels to waste heat and renewable energy sources (e.g. geothermal), which requires an alternative CO2 source instead of natural gas.

10. In the *Beleidsagenda Energietransitie 2016-2020* the goals related to the transition to a sustainable energy supply have been set. The challenges are in the sectors built environment, industry and the horticultural sector. By using renewable sources and residual heat for energy supply, a lack of CO2 arises in greenhouses. CO2 is released during the heat production. Growers need that CO2 for the cultivation of their crops. Therefore CO2 will have to be brought into the greenhouse in an alternative different way. Collective infrastructure for heat (heat networks, geothermal energy) have therefore be combined with solutions for CO2 delivery (capturing and purifying CO2 from our local industries and distribution via underground pipelines, for example).

11. Sustainable modernization of the greenhouse horticulture areas in the Greenports of North Holland means that there must be a sufficient CO2 supply.

12. The availability of waste CO2 from industry is an important prerequisite for this sustainable development in order to avoid summer heating and increase the energy efficiency of greenhouse production. But also because the use of renewable energy in greenhouses is only possible when the greenhouses have an “external” alternative for covering their demand for CO2 instead of using the flue gases from their cogeneration or boiler.

13. Since investments in a CO2 supply have a long payback period, the question is who will finance the funding gap in the start-up phase. The province is with restrictions willing to contribute to fund the gap for investments in CO2-capture and use-project.

14. The authorities have committed resources of €8.5 million for the development of CO2 infrastructure for the greenhouse areas within Greenport Aalsmeer and Greenport Noord-Holland Noord.

    - Greenport Aalsmeer: horticultural area *De Kwakel* (300 hectare).

    - Greenport Noord-Holland Noord: *AgriportA7* (600 hectare existing and 360 hectare to be built), *Alton* (85 hectare) and *Het Grootslag* (140 hectare).

15. The province Noord-Holland has the intention to subsidize the investor OCAP CO2 BV for the realisation of a CO2-utilization project.

16. Currently, OCAP CO2 BV supplies waste CO2 originating from a Shell refinery in Rotterdam and the bioethanol plant of Alco to greenhouses in the areas “Westland”, “Oostland” and “Zuidplaspolder”(www.ocap.nl). OCAP CO2 BV owns a CO2 transport pipeline and distribution grid located in the regions “Westland” and “Oostland”. OCAP CO2 BV purchases CO2 from:
    a) Shell Nederland Raffinaderijen BV (”Shell”) that comes free at their hydrogen production plant and
    b) Alco Group own sa bioethanol plant in the harbour area of Rotterdam. It is in the nature of the bioethanol production process that a lot of nearly pure CO2 comes free.

    The CO2 is compressed by OCAP CO2 BV and subsequently transported through the pipeline to be delivered to CO2 buyers in the region (being greenhouses). The expansion to PrimA4a (horticultural area in Greenport Aalsmeer) is in preparation for start realization in the autumn of 2018. Virtually all CO2 that is currently available at these sources in the CO2 season is supplied in these areas.

17. OCAP CO2 BV realizes at the location of the waste incinerator AEB in Amsterdam a CO2 liquefier (“vloeistofmaker”) with storage capacity with which gaseous CO2 can be liquefied. A pipe must be realized for this of 2.5 kilometers to connect the existing OCAP pipeline to the site from AEB (Waste to energy company and also a CO2-emitter). The liquefier is fed with CO2 from the two existing sources of OCAP: Shell and Alco (and in the future hopefully also from AEB). The liquid CO2 is delivered with trucks to two to be realized local CO2 networks in the greenhouse horticulture areas in Greenport Noord-Holland, namely Alton and Het Grootslag as well as the existing mini CO2-grid in AgriportA7. Such a local network, a 'mini-grid', consists of a central tank for storage of liquid CO2, an evaporator to enable the supply of gaseous CO2 to the local grid, a pipeline network for the distribution of the CO2 to the greenhouse companies and CO2 delivery stations for delivery of CO2 per company.

18. From the central storage, CO2 can also be evaporated to be returned to the OCAP network for peak and back-up demand. This contributes to, among other things, the reliability of supply to PrimA4a and De Kwakel.
    The location AEB has been chosen in anticipation of the realization of a large-scale CO2 capture project from the flue gases at AEB and because for the location a connection with the existing OCAP network is required. In addition, in the Amsterdam port area several project are being developed from which in the future CO2 of biogenic origin ('bio-CO2') could be sourced for liquefaction and supply to greenhouse horticulture. The investment is therefore: liquefier with CO2 storage tanks and evaporator, CO2 pipeline and mini grids.

19. The investment will be in state of the art technology which is not part of a Research & Development project.

20. A schematic overview of the project locations is presented in the figure below. The liquefier is the “Vloeistofmaker bij AEB”. With trucks the CO2 will be transported to the greenhouse areas Alton, AgriportA7 and Grootslag.

21. In Alton, AgriportA7 and Het Grootslag greenhouses are located which need CO2 for crop growth. They currently produce their own CO2 using cogeneration systems or gas fired boilers, also in summer when heat is not needed (so called “summer heating”). Also, there are plans for the development of new greenhouses. The availability of “external” CO2 and in particular waste CO2 from industry enables the growers to avoid “summer heating” and to save on the use of natural gas for producing their own CO2. Therefore, the project provides the growers with a viable alternative to the counterfactual situation. In the Greenport Noord Holland the conditions for geothermal energy are favourable. At AgriportA7 there is a geothermal source in operation and extension is being explored. At Het Grootslag the drilling has started for a geothermal source and in Alton studies have been started. When greenhouses are heated with renewable energy sources the necessity for external pure CO2 becomes higher.

22. The investment costs are:

• Liquefier, tanks and evaporator	[redacted]
• Transport pipeline OCAP-AEB	[redacted]
• Tanks & evaporators	[redacted]
• Distribution pipelines	[redacted]
• Connections	[redacted]
• Engineering, permits and project management	[redacted]
Total costs:	28,115,000

23. The environmental effect is in the end realised by the change in behaviour of the growers by using CO2 from OCAP CO2 BV instead of the use of natural gas to produce their own CO2. CO2 is commonly used in greenhouses: an increased CO2 concentration enhances crop growth. In the course of years, the dosing of CO2 has become an important production factor for growers. They currently produce their own CO2 using natural gas in a cogeneration system (most case) or gas fired boiler (some case). The aim is to realise energy savings in two ways:

(1) Avoiding “summer heating”.
The key problem is that CO2 is mostly needed in the summer when heat demand is low. Because of the importance of CO2-dosing, growers use their energy systems to produce CO2 although the heat is not needed. This is called “summer heating”.
The problem of “summer heating” is growing: much research effort is put into increasing the energy efficiency of greenhouses, for example in developing more energy efficient crop growth strategies. This reduces the demand for heat in summer even further. In buying the needed CO2 from OCAP CO2 BV, the growers can stop using their cogeneration system or gas fired boiler for the production of CO2 when heat is not needed.

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(2) Switching to renewable energy

When greenhouses switch to renewable (geothermal) energy, they face a problem during summertime. Because of the large CO2-demand during summer they need to operate a CHP. Since the CHP produces heat, they tend to stop the geothermal source during summer. Supplying external CO2 prohibits the operation of CHP's during summer and enables the growers to operate the geothermal source year-round.

Therefore, the availability of affordable CO2 is an important prerequisite for the sustainable development of greenhouse areas. Large energy savings can be realised when the greenhouses switch to renewable energy. As a result the savings on CO2 for renewable energy-supplied greenhouses equal the supply of CO2.

24. In the areas AgriportA7, Het Grootslag and Alton external CO2 supply is already an important precondition for the use of the renewable heat by geothermal sources which is already being used there or will be realized in the next two years.
The savings in natural gas consumption and CO2 emissions therefore a larger than just avoidance from traditional summer heating and is in fact 1-to-1. The avoided use of natural gas amounts to approximately 73 million m3 per year, which corresponds to an avoided CO2 emission of 130 kton per year (equal to the quantity of CO2 supply).

25. Next to the energy savings described above, the availability of affordable CO2 from OCAP CO2 BV enables the growers to enhance crop growth even further due to the high quality of the CO2 and by dosing more CO2 than before. This also reduces the specific energy use per unit produced.

National Legal Basis

26. The national legal basis for the aid is the "Algemene Wet Bestuursrecht" which enables the authorities to provide subsidy to legal entities.

Beneficiary

27. The beneficiary is OCAP CO2 BV. OCAP CO2 BV is a full daughter of Linde Gas Benelux B.V. ("Linde"), a supplier of industrial gases. The state aid will be granted to OCAP CO2 BV and enables OCAP CO2 BV to develop the project. These are local project and it is not economically feasible to extend the infrastructure to other member states. OCAP CO2 BV will not, in any form, pass on the aid it receives. The shareholder of OCAP CO2 BV will not receive (a part of) the aid, as the aid is used to finance the necessary investments undertaken by OCAP CO2 BV. Since the compensation Shell and Alco Group receive equals their exploitation costs, Shell and Alco Group as such are not beneficiary of the state aid. Of course the growers will benefit from the project, otherwise they would not buy the CO2 supplied by OCAP CO2 BV. However, the growers are the end-consumers and no beneficiary of the aid as such.

Budget

28. The Dutch authorities notify an overall budget of €3 million spread over 4 years.

Aid instrument and Funding

29. The aid will be made available to the beneficiary in the form of a direct grant.

Duration

30. The Dutch authorities notify the aid for the period from 2019 until 2023. The aid will only be provided to OCAP CO2 BV subject to approval by the Commission.

Cumulation

31. The present aid for the OCAP-project could be cumulated with EIA (Energy Investment Deduction). This is a tax exemption meant to stimulate investments in energy reduction or renewable energy. EIA however contains no state aid as meant in article 107 (1) of the EU-Treaty: EIA is a generic measure and is open to all companies on an equal basis. See also Decision N266/2003.

2. ASSESSMENT

Introduction

32. We have examined the aid in accordance with article 107 (3) (c) of the EU-Treaty. In our view the assessment of the compatibility of the proposed measure could based on the case "Aid for CO2 delivery to Zuidplaspolder" (N208/2010) and "Environmental protection through residual CO2 delivery to greenhouse horticulture" (SA.48816). The compatibility should be assessed on the basis of the Treaty, in analogous application of the provisions of section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling, as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

    The similarities between this project and the abovementioned case are as follows:

    - There are sources of a waste utility (CO2) which in the counterfactual situation is emitted in the atmosphere and which utility will in these case be delivered to third party consumers (the greenhouses).
    - The amount of energy used is not reduced by the company OCAP CO2 BV itself but the delivery of CO2 will reduce the amounts of primary energy used by the end consumers. Therefore the aim is also similar: to promote (external) primary energy savings.
    - There is the need for large investments in infrastructure (capturing the CO2, liquefaction of the CO2 and transporting the waste utility by pipelines and delivering it to end consumers).
    - The greenhouses face the same investment in heat generation in the counterfactual situation as in the 'state aid case'. They need to generate the same amount of heat and therefore have to invest in CHP's or renewable heat generation system with the same capacity.

Presence of State Aid Pursuant to Article 107 (3) Treaty on the Functioning of the European Union

33. A measure constitutes State aid under Article 107 (3) TFEU if it fulfils four conditions. Firstly, the funding stems from the State or from State resources. Secondly, the measure confers an advantage to certain undertakings or economic activities. Thirdly, the measure is selective. And fourthly, the measure affects trade between Member States and distorts or threatens to distort competition in the common market. The aid granted fulfils all the conditions mentioned above. The aid stems from State resources since it is funded by the Dutch federal budget. The aid confers an advantage because it provides a fund for an undertaking which this company would not obtain under normal market conditions. The aid is selective since it is granted only to one company. The aid has the potential to affect the trade between Member States and to distort competition because the beneficiary is active in the greenhouse sector, where trade between Member States takes place. The aid granted to the beneficiary thus constitutes state aid pursuant to Article 107 (3) TFEU.

Legality of the Aid

34. By notifying the measure before its implementation, the Dutch authorities have fulfilled their obligation according to Article 107 (3) of the EU Treaty. Any disbursements will only be made after the authorisation of the notified measure by the Commission.

Compatibility of the Aid with Article 107 (3) (c) TFEU

35. Under Article 107(3)(c) TFEU, aid to facilitate the development of certain economic activities or of certain economic areas may be considered to be compatible with the common market, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

36. The General Block Exemption Regulation (GBER) section 7 – Aid for environmental protection, section 4 – Aid for research and development and innovation and section 13 – Aid for local infrastructures both are not applicable, since the investment doesn't fulfil one of the two conditions in article 36.2: (a) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities by going beyond the applicable Union standards, irrespective of the presence of mandatory national standards that are more stringent than the Union standards; (b) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities in the absence of Union standards. Neither does it fulfil the condition in article 56.7: Dedicated infrastructure is not exempted. Article 25 GBER is not applicable since the investments do not meet the definition of "industrial' research' of 'experimental development' as defined in points 85 and 86.

37. In our opinion the aid does not fall entirely into the scope of application of one or more guidelines.

38. However, in our opinion the assessment of the state aid for the case at hand should be based in analogous application of the Community guidelines on State aid for environmental protection and energy (hereinafter referred to as EEAG), section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

39. In (22) EEAG is stated that "These Guidelines provide the compatibility criteria for aid schemes and individual aid for environmental protection and energy objectives which are subject to the notification obligation pursuant to Article 108(3) of the Treaty." However, in (19) For the purposes of these Guidelines the following definitions apply:

    (1) ´environmental protection´ means any action designed to remedy or prevent damage to physical surroundings or natural resources by a **beneficiary's own activities**, to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy- saving measure and the use of renewable sources of energy;

40. This condition is not fulfilled in the case at hand: the beneficiary of the aid is the the network company OCAP CO2 BV which does not carry out any activities of environmental protection in the sense of aforementioned point 19 (1) EEAG. In the present case, the environmental effect of the aid would be realised by the change in behaviour of the greenhouses using CO2 from OCAP instead of the use of natural gas to produce their own CO2, thus leading to primary energy savings on the part of the end consumers which should in turn reduce CO2 emissions thus contributing to environmental protection.

41. Therefore, the present case falls outside the scope of EEAG but in our opinion should be assessed analogous to EEAG, similar to the approach used in (N208/2010) and (SA.48816).

Assessment directly under Article 107 (3) (c) TFEU

(1) Is the aid measure aimed at a well-defined objective of common interest (i.e. does the proposed aid address a market failure or other objective)?

(2) Is the aid well-designed to deliver the objective of common interest? In particular:

    (a) Is the aid measure an appropriate instrument?
    (b) Is there an incentive effect, i.e. does the aid change the behaviour of firms?
    (c) Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?

(3) Are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

Objective of common interest

42. The aid measure has to aim at a well-defined objective of common interest. An objective of common interest is an objective which has been recognised by the European Union as being in the common interest.

43. The aid measure aim at the *Resource-efficient Europe* Flagship initiative of the Europe 2020 Strategy. This flagship initiative supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. The aid addresses the objectives laid down in the Europe 2020 initiative: *Energy 2020*: 20% savings in energy. The aid also responds to the objectives of the *EU Energy Package*, i.e.: reduction of at least 20% in greenhouse gases (GHG) by 2020.

44. The environmental policy of the Dutch Government has been laid down in the "Klimaatagenda" (2013). The environmental policy of the province Noord-Holland has been laid down in the aforementioned Strategisch Beleidskader Economie Noord-Holland (SBE) en Uitvoeringsagenda Economie Noord-Holland (UA) Beleidsagenda Energietransitie 2016-2020

45. The measure at hand aim at making better use of waste CO2 from industrial processes .To this end the measure support the construction of the necessary infrastructure to transport such CO2 to end consumers. The project is expected to lead to primary energy savings on the part of the end consumers, i.e. the greenhouses, which in turn should reduce CO2 emissions from fossil fuels, thus contributing to environmental protection. The EU institutions have recognised on many occasions that the protection of the environment and the reduction of CO2 emissions are in the common interest. In particular, the European Council made a commitment to achieve at least a 40% reduction in greenhouse gas emissions in 2030 as compared to 1990, at least 27% of total energy consumption from renewable energy in 2030 and at least a 27% increase in energy efficiency (the climate and energy package), and the European Parliament and the Council adopted in 2009 the corresponding legislation to meet these targets.

46. According to our calculations the measure in the end would achieve an annual reduction of CO2 emissions of 130 kton.

47. It can thus be concluded that the proposed measure aims at a well-defined objective of common interest.

Need for state aid: appropriate instrument?

48. There are no other Dutch aid measures which could be used to finance the project. MIA/Vamil (The "Aanwijzingsregeling willekeurige afschrijving en investeringsaftrek milieu-investeringen 2009", IENM/BSK-2015/232935) enables investors in CO2-capture investments to use the depreciation and investment deduction only if the criteria of GBER article 36 are met. Since this is not the case for the investments at hand, MIA/Vamil is not applicable.

49. Because of the contribution to the environmental goals of the Dutch government is it important for the Dutch authorities that the project will be established. The project is an example of increasing horticultural energy efficiency and energy savings which could be followed by other horticultural parties.

50. Most important obstacle for the realisation are the low revenues for the beneficiary. Granting the aid would raise the project return (IRR) of the investments and in the end the business case. The aid makes it possible for the beneficiary to realise the project. Therefore, a financial direct grant is the only instrument which changes the behaviour of the beneficiary in such a way that the project will be realised and the environmental impact will be reached.

51. The only theoretical alternative to the planned subsidies would be to encourage the greenhouse growers with subsidies for building greenhouses that would deliver an environmental benefit

and/or for the Alton, AgriportA7 and Het Grootslag areas building connecting pipelines to the existing OCAP-grid. However, part of the areas are green fields, which means that there are as of yet no greenhouse growers that own the land on which the greenhouses will be built and the areas are very remote from the OCAP-grid which makes investments even more unattractive. As a result, there are no guarantees of achieving the environmental goals. Once the greenhouses have been built with a CHP or boiler, it will be financially less attractive for the growers to build a pipeline grid connecting the greenhouses.

52. In Noord-Holland several concentrated greenhouse areas exist. Only Greenport Aalsmeer is nearby the existing OCAP grid. For the other areas local mini grids will be developed, because the distances are long and the connection of these areas is not feasible.

53. Publicly exploiting the deliverance of external CO2 to the greenhouses, would involve higher interference with the greenhouse and energy market whilst there would be no guarantee that a public company would act only on market terms acceptable to a private investor. Indeed, even if a publicly owned company was to be set up for that purpose, it can be excluded that it could start operations without a similar subsidy for the initial investment, in conditions similar to the notified measure.

54. The direct subsidies to the infrastructure operator OCAP offers a greater guarantee for reaching the environmental goals and doing so in a way that is efficient and transparent. It paves the way for investments in renewable energy supply, since the farmers would not need to produce CO2 by means of CHP or boiler. It appears, therefore, that the envisaged aid in the form of direct grants constitutes an appropriate instrument to achieve the desired CO2 reductions.

Incentive effect

55. According to point 145 EEAG, State aid must have an incentive effect. The incentive effect is the causal relation between the granted State aid and a change in the behaviour of the beneficiary that results in a higher level of environmental protection. In that regard it can be noted that confirmed in line with point 49 EEAG the aid will be granted to the project under the condition that they have not been started prior to the submission of the applications for the aid to the national authorities. Furthermore, in line with provision (57) EEAG the business case do not provide for a sufficient incentive to build the infrastructure project without the aid, with the aid the project will have sufficient returns on investment (although each investor has its own criteria which have to be met). It can therefore be concluded that the envisaged aid measurs provide for the necessary incentive effect.

56. The market does not provide enough incentives for the recipient to invest. The infrastructures are costly, the revenues for CO2 are low and the project are known to have the specific risk of delay in the development of the greenhouse areas. Without aid the internal rate of returns (IRR) are too low and the project are not financeable. Therefore OCAP CO2 BV will not invest without aid. When raising the price for the offtake of CO2 is expected that growers will take less CO2 and in effect there will not be enough market volume left to justify the project.

57. The profitability of the **project** in terms of the internal rate of return (IRR) without state aid is [redacted]% (before taxes) over the time horizon by which the investment is fully depreciated (15 years). This is too low for the shareholder to provide the risk capital to OCAP CO2 BV for this investment. This low IRR is primarily the result of the distance of AEB in respect to the current transportation pipeline of OCAP CO2 BV (2.5 kilometer). With the state aid of €3 million the IRR will increase to to the hurdle rate for the investor of 1[redacted]% (before taxes). The decision for the equity investment by the beneficiary is based on a cut-off rate (i.e. minimum return rate) of an IRR of [redacted]%.

58. With aid the project become financially viable and therefore the aid measure provide the incentive necessary for OCAP CO2 BV to invest. Attached are calculations of the business case.

59. The greenhouses will use CO2 from OCAP CO2 BV for an affordable price instead of producing their own (low quality) CO2 using natural gas.

The prices that have been used to investigate the business case are based on the experience of selling CO2 by OCAP CO2 BV in the existing situation as well as on the range of prices greenhouse growers are willing to pay for the production of CO2. Prices are aimed to be as high as possible in light of the benefits for the grower described below and in light of the necessary scope of supply to make the project feasible. To describe the incentive for the growers to change his behaviour, the growers are divided in two categories:

- *Growers using cogeneration or a boiler*
  With the external CO2 supplied the growers can optimize the operation of their cogeneration or boiler facility. It secures that the cogeneration or boilers only have to be used when heat is needed and not for the sole purpose of producing CO2 ("summer heating"). It also enables the greenhouses to operate their cogeneration more flexible and use the cogeneration mainly during peak moments when the produced electricity is worth most. This leads to the saving of natural gas as well as the production of electricity at the most favourable moments. Savings vary with the varying prices for (used) natural gas and (produced) electricity (cogeneration) as well as with the efficiency and technical constraints of the greenhouse energy system to operate flexibly (size of the heat buffer, etc.). See also the description of the counterfactual situation below for an overview of the current costs of CO2 alternatives for growers in comparison with the sales prices that OCAP CO2 BV uses.

  Next to these savings, the growers appreciate the quality of the CO2 and the possibility to use more CO2 than before. Both enable the growers to enhance their crop growth. The realised production benefits are difficult to quantify as production figures depend on a number of factors like the realized CO2 concentration, amount of (sun)light, temperature, water gift, fertilizers, growth strategy, etc.

- *Growers using renewable energy*
  The incentive for a grower to switch to renewable energy is not solely provided by the availability of CO2. But these growers depend entirely on "external" sources of CO2 and the availability of affordable CO2 is therefore a prerequisite. To make the switch, the external CO2 in combination with the renewable energy needs to be competitive with the energy and CO2 produced with common cogeneration facilities. The results of this assessment will vary from grower to grower and depend also on the type of renewable energy used, but, for example, the first greenhouses in the Netherlands using geothermal heat where realised using OCAP CO2 BV's CO2 to cover the total need for CO2. This proves that the availability of external CO2 can stimulate growers to make the switch to renewable energy.

Counterfactual situation

60. In the counterfactual situation, OCAP CO2 BV will not invest in these project. OCAP CO2 BV will not purchase extra CO2 from Alco group and/or Shell and will not sell this CO2 to growers. The growers in the greenhouse sector will keep on using natural gas in their cogeneration system (most case) or their boiler (some case) to produce the amount of CO2 required for their production.

61. The costs to produce CO2 using a boiler also depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. The costs of CO2 without the usage of heat are some 70-80 EUR/ton at the current prices for natural gas. When the heat can be used, the costs are close to zero.

62. The costs of producing CO2 using a cogeneration system depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. It also depends on whether this production is during peak or during off-peak hours as this determines the value of the produced electricity. The costs of CO2 without the usage of heat are between 30 and 60 EUR/ton at the current prices for natural gas and electricity.

63. The only current alternative, instead of producing CO2 from natural gas, is to purchase liquid CO2 delivered by truck. The price of liquid CO2 starts at around 70 EUR/ton. This is not competitive to the alternatives. This price also prevents growers from switching to renewable energy.

64. By comparison, the current sales prices for OCAP CO2 BV lie between [redacted] and [redacted] EUR/ton depending on the purchase volume. There is no market, other than existing supply by OCAP CO2 BV in other greenhouse areas. Therefore no market price can be defined, other than the price OCAP CO2 BV uses in the current supply areas.

65. In previous cases the average sales prices were: Zuidplaspolder: [redacted] EUR/ton, PrimA4a: [redacted]/EUR/ton.

66. For the case at hand the estimated average sales price is [redacted] EUR/ton to ECW which is an average of sales directly to greenhouses, back-up sales to the OCAP main grid and ECW, because ECW is the distributor at AgriportA7 and has costs for depreciation and maintenance.

    An indication of these costs is presented in the table below:

	Cost of CO2 [EUR/ton]
Cogen or boiler, use of heat	[redacted]
Cogen, no use of heat	[redacted]
Boiler, no use of heat	[redacted]
Liquid CO2	[redacted]
OCAP CO2 BV	[redacted]

Proportionality - Eligible Costs

67. According to (149) EEAG the eligible costs are determined as the extra investment costs as established in point (22). In the case at hand the costs of achieving the common interest objective can be identified in the total investment costs as separate investments, because the investments are readily identifiable "add-on components" to pre-existing facilities. Therefore the costs of the separate investment constitute the eligible costs.

68. All growers own a cogeneration system and/or a gas fired boiler for heating purposes, CO2 production (as part of the flue gases) and, in case of cogeneration, to cover their electricity demand or to supply of electricity to the grid. In the current and counterfactual situation the growers in the greenhouse sector thus use natural gas in these energy systems to produce the amount of CO2 required for enhancing their production rate and quality. The investment in these energy systems (for existing or new greenhouses) does not change as a result of the project. Therefore, the investments in the project are 100% additional. There is no reasonable alternative investment for producing CO2 next to using their own existing energy system.

69. The greenhouses do not avoid an investment in local facilities. The growers avoid summer heating, but they still need their production facilities to produce heat for their greenhouses during winter. For renewable heating the situation arises that geothermal sources are stopped in summertime and the cogeneration will be used to produce heat and CO2. A cogeneration system has three functions: production of heat, electricity and CO2. During summer the production of heat is a by-product, which is not needed and will be destroyed. Also, the investment in a cogeneration system does not change as a result of the project. The growers still need the same amount of heat during winter and/or the same amount of CO2 and heat during summer.

Aid Intensity

70. The Commission has generally accepted in the past an aid intensity of 50% for investments into transport infrastructure and for investments into gridlines[1].

[1] E.g. the propylene gridline case C 67 to C 69/2003 (ex N355/03, N400/03 and N473/03), Commission decision of 02.03.2005 (point 55).

71. The Commission has also accepted an aid intensity of 60% for investments into networks for district heating and cooling[2].

72. (68) EEAG: environmental and energy aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective aimed for.

73. (69) EEAG: as a general principle, aid will be considered to be limited to the minimum necessary if the aid corresponds to the net extra cost necessary to meet the objective, compared to the counterfactual scenario in the absence of aid. The net extra cost is determined by the difference between the economic benefits and costs (including the investment and operation) of the aided project and those of the alternative investment project which the company would carry out in the absence of aid, that is the counterfactual scenario. Without aid OCAP, would never invest in an alternative project, because of the hurdle rate of the company. Also, the growers would not make additional investments for producing CO2. Therefore, the investments are 100% additional.

74. The aid intensity in Annex 1 EEAG states that for district heating infrastructure this can be 100% of the eligible costs.

75. Section 3.2.5.3. EEAG sets additional conditions for individually notifiable investment and operating aid, which in our opinion could be applicable in the case at hand.

76. (84) EEAG: as a general rule, individually notifiable aid will be considered to be limited to the minimum if the aid amount corresponds to the net extra costs of the aided investment, compared to the counterfactual scenario in the absence of aid. All relevant costs and benefits must be taken into account over the lifetime of the project. In the view of the Dutch authorities the general rule cannot be applied, since there is no counterfactual situation.

77. As stated before, there is no counterfactual scenario and therefore in the case at hand (85) EEAG could be used: if no specific alternative project can be identified as a counterfactual scenario, the Commission will verify whether the aid amount exceeds the minimum necessary to make the aided project sufficiently profitable, for instance whether it increases its IRR beyond the normal rates of return applied by the undertaking concerned in other investment project of a similar kind. When that benchmark is not available, the cost of capital of the company as a whole or rates of return commonly observed in the industry concerned may be used for that purpose. The benchmark is available and is equal to the benchmark used in (N208/2010) and (SA.48816).

78. The requested aid amounts are needed to increase the IRR to the normal rate of return applied by the beneficiary in former investment project.

79. (86) EEAG: the Member State should provide evidence that the aid amount is kept to the minimum. Calculations used for the analysis of the incentive effect can also be used to assess whether the aid is proportionate. The Member State must demonstrate the proportionality on the basis of the documentation referred to in paragraph (62). This documentation has been attached to this document and consists of cash flow-analysis of the project.

80. (62) EEAG: the Member States are, in particular, invited to rely on contemporary, relevant and credible evidence including, for example official board documents, credit committee reports, risk assessments financial reports, internal business plans, expert opinions and other studies related to the investment project under assessment. Documents containing information on demand forecasts, cost forecasts, financial forecasts, documents that are submitted to an investment committee and that elaborate on various investment scenarios, or documents provided to the financial institutions could help to verify the incentive effect. This documentation has been attached to this document

[2] E.g. State aid case N584/2008, Commission decision of 18.06.2009 (aid intensity at most 60%, point 64).

81. The requested state aid for the project of EUR 3 million (NPV is EUR 2,882,609) is 11% of the investment costs and 92.5% of the funding gap. In the PrimA4a case this was 99.3%. The funding gap is EUR 3,115,907

Distortion of Competition and Balancing Test

82. The aid will be granted by a (sub) national authority and thus by the State through State resources within the meaning of the Treaty. It distorts competition by selectively favouring the company OCAP, that chooses to invest in the project.

83. The main competitors in the market are suppliers of liquid CO2. Although the shareholder of OCAP CO2 B.V. operates in a competitive market, no other competitors are interested in the realisation of a CO2 grid since the initial investment in a primary pipeline form industry to greenhouses is much too high to provide for reasonable returns on investment. The market for the transport of gaseous CO2 is by definition bound to the location of the pipelines and therefore local by nature. Therefore the effect on trade between member states is limited. Also, considering the structure of the market, the limited availability of transport facilities (pipelines and compression equipment) as well as the substantial investments required for entrance to the market it is not expected that competitors would enter this within the foreseeable future. There are indirect competitors who deliver liquid CO2 by truck. However, costs for liquid CO2 is almost the double of gaseous CO2 delivered by pipeline. Therefore, without the ability to use gaseous CO2 form OCAP CO2 BV most greenhouse undertakings will produce their own CO2. Although OCAP CO2 BV operates in a competitive market, there are no competitors active on the market of supplying CO2 using a pipeline in this area.

84. The benefits for the beneficiary of reusing the CO2 over the lifetime of the investments are not such that the extra environmental costs can be recouped even with aid.

85. The benefits for the grower are enhanced crop growth and better quality of crops. Because of this advantage they are willing to pay the CO2 prices resulting from this project.

86. There is no competitive pressure for the growers to maintain a high level of environmental protection. The “carbon footprint” is still no important factor in the market for horticultural products.

87. As far as he Dutch authorities are aware, there are currently no ongoing negotiations at Community level to introduce new or higher mandatory standards.

88. The project face the risk of a slow development of new greenhouses in the areas. Hence, the purchase volume in the first years of operation could be lower than foreseen. This can lead to a lower cash flow.

89. Our assessment of the distortion on competition is that it is limited since the nature of the product market involved and the relative high risks and costs of capital for initial investments. This makes it not attractive for competitors to enter this new market. The aid measure do not affect the market failure in such a way that competition will severely be distorted.

3. CONCLUSION

90. In short, in our opinion the OCAP CO2 BV CO2-project contributes to both the national and European environmental goals, without disproportionally disturbing trade on the internal market.

91. The project will lead to considerable energy savings, while at the same time reducing the emission of CO2 gas into the atmosphere to a great extent. Moreover, it reduces the CO2 emissions that are produced by the production of the renewable fuel bio-ethanol and biogas.

92. In the opinion of the Dutch authorities, it can thus be concluded that the aid for the construction by OCAP CO2 BV of infrastructures for the off-take of waste CO2 from a bioethanol plant and delivery of this CO2 to greenhouses for crop growth purposes is to be approved in analogy to the Guidelines on State aid for Environmental protection and Energy (2014-2020).

93. The Dutch authorities therefore kindly request the Commission to find the aid measure to be compatible with the common market pursuant to Article 107(3) (c) of the EC Treaty.

Prenotification of State aid to OCAP

Date: 04/06/2018

1. GENERAL

Description of the aid

1. The primary objective of the aid measure is to increase environmental protection in several horticultural areas in the province Noord-Holland (NL) by reducing the use of primary energy sources for conventional forms of CO2 generation for horticultural processes. This will be achieved by transporting CO2 from industrial sources and biomass digesters to growers with a CO2 demand. Investments in CO2 capturing and infrastructure are needed to realise this objective.

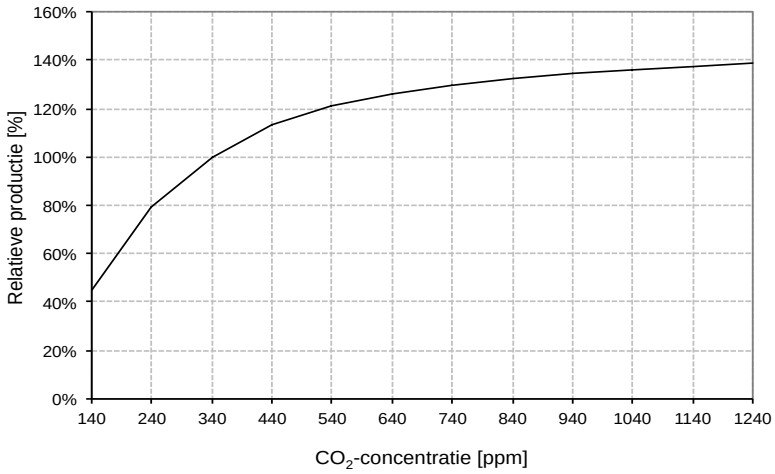
2. The Dutch authorities want to reduce CO2 emissions in order to increase environmental protection and reach its COP21 targets. The aim of this aid is to enable greenhouses to save on the use of natural gas by switching to industrial and biomass waste CO2. The Dutch authorities expect the measure to result in CO2 reductions with at least 37.5 kton and probably 75 kton per year.

3. The Dutch authorities will grant EUR 4 million for the construction by OCAP CO2 BV of an infrastructure for the off-take of waste CO2 from an existing bioethanol plant and delivery of this CO2 to greenhouses, where it is used to enhance crop growth instead of using (the CO2 in) flue gases by burning natural gas. The project requires an investment in compression and infrastructure of EUR 27 million by OCAP CO2 BV which is found to be economically not feasible without investment aid.

Description of the project

4. The Greenports Aalsmeer and Noord-Holland Noord are one of the largest horticultural centres in the Netherlands. The province of Noord Holland and the municipalities have set an agenda for the modernisation and restructuring of the Greenports. One of the main objectives is to provide for the establishment of sustainable conditions such as a CO2 and a heat network.

5. CO2 is necessary for the growth of plants and an important production factor in greenhouse horticulture. The higher the CO2 concentration in the air, the better the plants will grow. Improving plant growth translates in higher yields and efficient use of resources such as energy and space. The effect of the CO2 concentration on plant growth, and therefore production in the greenhouse, is shown in the graph below. Production in this graph is set at 100% at the CO2 concentration in the open air (approx. 340 ppm).



6. Most CO2 is needed in the summer when the plant grows best under the influence of the (sun) light. At that moment, "fresh" CO2 is supplied to the outside air by ventilation via the windows, which are then open in the greenhouse. However, this is insufficient to allow the plant to grow optimally. If CO2 is not actively dosed, the CO2 concentration drops to (far) below the external value of 340 ppm. In practice, examples are known in which the concentration falls back below 200 ppm. The plant then decelerates strongly in growth, as the graph shows, until the CO2 uptake by the plant is in equilibrium with the CO2 supplied by ventilation. The grower will actively dose extra CO2 to prevent a drop in the CO2 concentration and preferably achieve a concentration that is above the outside value. As soon as the concentration exceeds the external value, CO2 will be lost on balance through ventilation. The grower seeks the balance between extra growth and the costs of dosing extra CO2.

7. Traditionally, the grower uses the flue gases from his boiler or cogeneration plant to dose CO2. In the summer, the grower burns his boiler or cogeneration for this purpose, without the heat produced thereby being used; the "summer heating". This costs the grower money and burdens the environment. Sometimes liquid CO2 is also used, but due to the cost price this is mainly used in addition to or on top of the dosing of flue gases.

8. In the framework of the so called "Green Deal" between the Dutch national government and the Province of North-Holland and private companies amongst which HVC and OCAP CO2 BV, the intention to provide waste CO2 to greenhouses was expressed. A Green Deal is an informal public-private partnership in which parties express their intentions with regard to sustainable initiatives to remove certain barriers for these initiatives to be realised. In the Green Deal, these parties agreed to realize a source of high-quality CO2 (from flue gases) and a pipeline network for the distribution of CO2 to greenhouse horticulture companies in Noord-Holland with an economic return for the horticultural sector. The aforementioned parties work together and focus on fulfilling the conditions and the steps to be taken for both the CO2 transport network and the development of a way to filter out CO2 from flue gases.

9. In the official policy documents of the province Noord-Holland, the *Strategisch Beleidskader Economie Noord-Holland* (SBE) en *Uitvoeringsagenda Economie Noord-Holland* (UA) the policy on economic developments and the transition towards a circular and economy and a renewable energy supply are decided. For the horticultural sector the challenge is to switch form fossil fuels to waste heat and renewable energy sources (e.g. geothermal), which requires an alternative CO2 source instead of natural gas.

   In the *Beleidsagenda Energietransitie 2016-2020* the goals related to the transition to a sustainable energy supply have been set. The challenges are in the sectors built environment, industry and the horticultural sector. By using renewable sources and residual heat for energy supply, a lack of CO2 arises in greenhouses. CO2 is released during the heat production. Growers need that CO2 for the cultivation of their crops. Therefore CO2 will have to be brought into the greenhouse in an alternative different way. Collective infrastructure for heat (heat networks, geothermal energy) have therefore be combined with solutions for CO2 delivery

(capturing and purifying CO2 from our local industries and distribution via underground pipelines, for example).

10. Sustainable modernization of the greenhouse horticulture areas in the Greenports of North Holland means that there must be a sufficient CO2 supply.

11. The availability of waste CO2 from industry is an important prerequisite for this sustainable development in order to avoid summer heating and increase the energy efficiency of greenhouse production. But also because the use of renewable energy in greenhouses is only possible when the greenhouses have an "external" alternative for covering their demand for CO2 instead of using the flue gases from their cogeneration or boiler.

12. Since investments in a CO2 supply have a long payback period, the question is who will finance the funding gap in the start-up phase. The province is with restrictions willing to contribute to fund the gap for investments in CO2-capture and use-project.

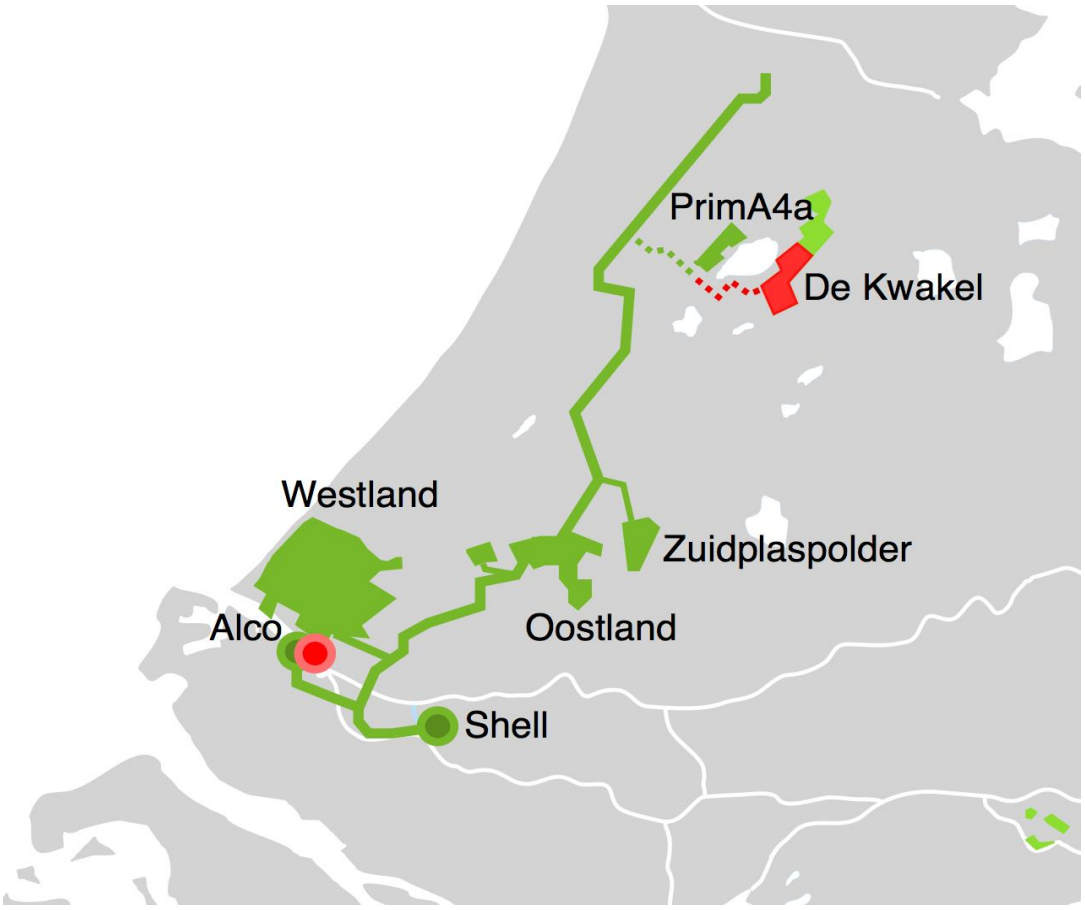
13. The authorities have committed resources of €8.5 million for the development of CO2 infrastructure for the greenhouse areas within Greenport Aalsmeer and Greenport Noord-Holland Noord.

    - Greenport Aalsmeer: horticultural area *De Kwakel* (300 hectare).

    - Greenport Noord-Holland Noord: *AgriportA7* (600 hectare existing and 360 hectare to be built), *Alton* (85 hectare) and *Het Grootslag* (140 hectare).

14. The province Noord-Holland has the intention to subsidize the investor OCAP CO2 BV for the realisation of a CO2-utilization project.

15. OCAP has the ambition to expand the supply of CO2 to greenhouse horticulture near De Kwakel (area in the Greenport Aalsmeer). The expansion of the CO2 supply involves an investment of approximately €27 million because, in addition to the network, an investment is also needed in a compressor station at CO2 supplier Alco to be able to source additional CO2 for the supply to greenhouse horticulture in De Kwakel. A relatively long transport pipeline is necessary, building on the transport pipeline to PrimA4a, to unlock De Kwakel. The investment in the connecting transport pipeline amounts to approximately [redacted] million.



16. Because extra capacity will become available at the Alco source in 2020, expansion of the CO2 supply to De Kwakel (red in the figure above) will become possible. To this end, a new compressor station at Alco must be realized (red circle in the figure above). On the other hand, the transport infrastructure must be extended from the transport pipeline realized for PrimA4a and a distribution network must be built in order to be able to connect the greenhouses in De Kwakel.

17. The investment will be in state of the art technology which is not part of a Research & Development project.

18. The investment costs are:

• Compressor	[redacted]
• Transport pipeline Kwakel	[redacted]
• Reduction station	[redacted]
• Distribution pipelines	[redacted]
• Connections	[redacted]
• Engineering and project management	[redacted]
Total costs:	27,227,750

19. The environmental effect is in the end realised by the change in behaviour of the growers by using CO2 from OCAP CO2 BV instead of the use of natural gas to produce their own CO2. CO2 is commonly used in greenhouses: an increased CO2 concentration enhances crop growth. In the course of years, the dosing of CO2 has become an important production factor for growers. They currently produce their own CO2 using natural gas in a cogeneration system (most case) or gas fired boiler (some case). The aim is to realise energy savings in two ways:

(1) *Avoiding "summer heating".*
The key problem is that CO2 is mostly needed in the summer when heat demand is low. Because of the importance of CO2-dosing, growers use their energy systems to produce CO2 although the heat is not needed. This is called "summer heating".
The problem of "summer heating" is growing: much research effort is put into increasing the energy efficiency of greenhouses, for example in developing more energy efficient crop growth strategies. This reduces the demand for heat in summer even further. In buying the needed CO2 from OCAP CO2 BV, the growers can stop using their cogeneration system or gas fired boiler for the production of CO2 when heat is not needed.

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(2) *Switching to renewable energy*
When greenhouses switch to renewable (geothermal) energy, they face a problem during summertime. Because of the large CO2-demand during summer they need to operate a CHP. Since the CHP produces heat, they tend to stop the geothermal source during summer. Supplying external CO2 prohibits the operation of CHP's during summer and enables the growers to operate the geothermal source year-round.

Therefore, the availability of affordable CO2 is an important prerequisite for the sustainable development of greenhouse areas. Large energy savings can be realised when the greenhouses switch to renewable energy. As a result the savings on CO2 for renewable energy-supplied greenhouses equal the supply of CO2.

20. By avoiding 'summer heating' the greenhouse growers can achieve an annual energy saving of approximately 21 million m3 natural gas. This avoids the emission of approximately 37.5 kton of CO2. In addition, external CO2 supply is an important precondition for the use of renewable heat (residual heat, geothermal heat, cold storage, etc.). The savings in natural gas consumption and CO2 emissions can therefore be significantly increased further. If a solution is found for renewable heat supply, for which a combination with a CO2 supply is necessary, a total of 42 million m3 of gas will be saved each year. This is equivalent to a reduction of 75 kton in the emissions of CO2.

21. Next to the energy savings described above, the availability of affordable CO2 from OCAP CO2 BV enables the growers to enhance crop growth even further due to the high quality of the CO2 and by dosing more CO2 than before. This also reduces the specific energy use per unit produced.

National Legal Basis

22. The national legal basis for the aid is the "Algemene Wet Bestuursrecht" which enables the authorities to provide subsidy to legal entities.

Beneficiary

23. The beneficiary is OCAP CO2 BV. OCAP CO2 BV is a full daughter of Linde Gas Benelux B.V. ("Linde"), a supplier of industrial gases. The state aid will be granted to OCAP CO2 BV and enables OCAP CO2 BV to develop the project. These are local project and it is not economically feasible to extend the infrastructure to other member states. OCAP CO2 BV will not, in any form, pass on the aid it receives. The shareholder of OCAP CO2 BV will not receive (a part of) the aid, as the aid is used to finance the necessary investments undertaken by OCAP CO2 BV. Since the compensation Shell and Alco Group receive equals their exploitation costs, Shell and Alco Group as such are not beneficiary of the state aid. Of course the growers will benefit from the project, otherwise they would not buy the CO2 supplied by OCAP CO2 BV. However, the growers are the end-consumers and no beneficiary of the aid as such.

Budget

24. The Dutch authorities notify an overall budget of €4 million spread over 4 years.

Aid instrument and Funding

25. The aid will be made available to the beneficiary in the form of a direct grant.

Duration

26. The Dutch authorities notify the aid for the period from 2019 until 2023. The aid will only be provided to OCAP CO2 BV subject to approval by the Commission.

Cumulation

27. The present aid for the OCAP-project could be cumulated with EIA (Energy Investment Deduction). This is a tax exemption meant to stimulate investments in energy reduction or renewable energy. EIA however contains no state aid as meant in article 107 (1) of the EU-Treaty: EIA is a generic measure and is open to all companies on an equal basis. See also Decision N266/2003.

ASSESSMENT

Introduction

28. We have examined the aid in accordance with article 107 (3) (c) of the EU-Treaty. In our view the assessment of the compatibility of the proposed measure could based on the case "Aid for CO2 delivery to Zuidplaspolder" (N208/2010) and "Environmental protection through residual CO2 delivery to greenhouse horticulture" (SA.48816). The compatibility should be assessed on the basis of the Treaty, in analogous application of the provisions of section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling, as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

    The similarities between this project and the abovementioned case are as follows:

    - There are sources of a waste utility (CO2) which in the counterfactual situation is emitted in the atmosphere and which utility will in these cases be delivered to third party consumers (the greenhouses).
    - The amount of energy used is not reduced by the company OCAP CO2 BV itself but the delivery of CO2 will reduce the amounts of primary energy used by the end consumers. Therefore the aim is also similar: to promote (external) primary energy savings.
    - There is the need for large investments in infrastructure (capturing the CO2, liquefaction of the CO2 and transporting the waste utility by pipelines and delivering it to end consumers).
    - The greenhouses face the same investment in heat generation in the counterfactual situation as in the 'state aid case'. They need to generate the same amount of heat and therefore have to invest in CHP's or renewable heat generation system with the same capacity.

Presence of State Aid Pursuant to Article 107 (3) Treaty on the Functioning of the European Union

29. A measure constitutes State aid under Article 107 (3) TFEU if it fulfils four conditions. Firstly, the funding stems from the State or from State resources. Secondly, the measure confers an advantage to certain undertakings or economic activities. Thirdly, the measure is selective. And fourthly, the measure affects trade between Member States and distorts or threatens to distort competition in the common market. The aid granted fulfils all the conditions mentioned above. The aid stems from State resources since it is funded by the Dutch federal budget. The aid confers an advantage because it provides a fund for an undertaking which this company would not obtain under normal market conditions. The aid is selective since it is granted only to one company. The aid has the potential to affect the trade between Member States and to distort competition because the beneficiary is active in the greenhouse sector, where trade between Member States takes place. The aid granted to the beneficiary thus constitutes state aid pursuant to Article 107 (3) TFEU.

Legality of the Aid

30. By notifying the measure before its implementation, the Dutch authorities have fulfilled their obligation according to Article 107 (3) of the EU Treaty. Any disbursements will only be made after the authorisation of the notified measure by the Commission.

Compatibility of the Aid with Article 107 (3) (c) TFEU

31. Under Article 107(3)(c) TFEU, aid to facilitate the development of certain economic activities or of certain economic areas may be considered to be compatible with the common market, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

32. The General Block Exemption Regulation (GBER) section 7 – Aid for environmental protection, section 4 – Aid for research and development and innovation and section 13 – Aid for local infrastructures both are not applicable, since the investment doesn't fulfil one of the two conditions in article 36.2: (a) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities by going beyond the applicable Union standards, irrespective of the presence of mandatory national standards that are more stringent than the Union standards; (b) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities in the absence of Union standards. Neither does it fulfil the condition in article 56.7: Dedicated infrastructure is not exempted. Article 25 GBER is not applicable since the investments do not meet the definition of "industrial' research' of 'experimental development' as defined in points 85 and 86.

33. In our opinion the aid does not fall entirely into the scope of application of one or more guidelines.

34. However, in our opinion the assessment of the state aid for the case at hand should be based in analogous application of the Community guidelines on State aid for environmental protection and energy (hereinafter referred to as EEAG), section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

35. In (22) EEAG is stated that "These Guidelines provide the compatibility criteria for aid schemes and individual aid for environmental protection and energy objectives which are subject to the notification obligation pursuant to Article 108(3) of the Treaty." However, in (19) For the purposes of these Guidelines the following definitions apply:

    (1) ´environmental protection´ means any action designed to remedy or prevent damage to physical surroundings or natural resources by a **beneficiary's own activities**, to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy- saving measure and the use of renewable sources of energy;

36. This condition is not fulfilled in the case at hand: the beneficiary of the aid is the network company OCAP CO2 BV which does not carry out any activities of environmental protection in the sense of aforementioned point 19 (1) EEAG. In the present case, the environmental effect of the aid would be realised by the change in behaviour of the greenhouses using CO2 from OCAP instead of the use of natural gas to produce their own CO2, thus leading to primary energy savings on the part of the end consumers which should in turn reduce CO2 emissions thus contributing to environmental protection.

37. Therefore, the present case falls outside the scope of EEAG but in our opinion should be assessed analogous to EEAG, similar to the approach used in (N208/2010) and (SA.48816).

Assessment directly under Article 107 (3) (c) TFEU

(1) Is the aid measure aimed at a well-defined objective of common interest (i.e. does the proposed aid address a market failure or other objective)?

(2) Is the aid well-designed to deliver the objective of common interest? In particular:

  (a) Is the aid measure an appropriate instrument?
  (b) Is there an incentive effect, i.e. does the aid change the behaviour of firms?
  (c) Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?

(3) Are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

Objective of common interest

38. The aid measure has to aim at a well-defined objective of common interest. An objective of common interest is an objective which has been recognised by the European Union as being in the common interest.

39. The aid measure aim at the *Resource-efficient Europe* Flagship initiative of the Europe 2020 Strategy. This flagship initiative supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. The aid addresses the objectives laid down in the Europe 2020 initiative: *Energy 2020*: 20% savings in energy. The aid also responds to the objectives of the *EU Energy Package*, i.e.: reduction of at least 20% in greenhouse gases (GHG) by 2020.

40. The environmental policy of the Dutch Government has been laid down in the “Klimaatagenda” (2013). The environmental policy of the province Noord-Holland has been laid down in the aforementioned Strategisch Beleidskader Economie Noord-Holland (SBE) en Uitvoeringsagenda Economie Noord-Holland (UA) Beleidsagenda Energietransitie 2016-2020.

41. The measure at hand aim at making better use of waste CO2 from industrial processes.To this end the measure support the construction of the necessary infrastructure to transport such CO2 to end consumers. The project is expected to lead to primary energy savings on the part of the end consumers, i.e. the greenhouses, which in turn should reduce CO2 emissions from fossil fuels, thus contributing to environmental protection. The EU institutions have recognised on many occasions that the protection of the environment and the reduction of CO2 emissions are in the common interest. In particular, the European Council made a commitment to achieve at least a 40% reduction in greenhouse gas emissions in 2030 as compared to 1990, at least 27% of total energy consumption from renewable energy in 2030 and at least a 27% increase in energy efficiency (the climate and energy package), and the European Parliament and the Council adopted in 2009 the corresponding legislation to meet these targets.

42. According to our calculations the measure in the end would achieve an annual reduction of CO2 emissions of at least 37.5 kton and probably 75 kton per year.

43. It can thus be concluded that the proposed measure aims at a well-defined objective of common interest.

Need for state aid: appropriate instrument?

44. There are no other Dutch aid measures which could be used to finance the project. MIA/Vamil (The "Aanwijzingsregeling willekeurige afschrijving en investeringsaftrek milieu-investeringen 2009", IENM/BSK-2015/232935) enables investors in CO2-capture investments to use the depreciation and investment deduction only if the criteria of GBER article 36 are met. Since this is not the case for the investments at hand, MIA/Vamil is not applicable.

45. Because of the contribution to the environmental goals of the Dutch government is it important for the Dutch authorities that the project will be established. The project is an example of increasing horticultural energy efficiency and energy savings which could be followed by other horticultural parties.

46. Most important obstacle for the realisation are the low revenues for the beneficiary. Granting the aid would raise the project return (IRR) of the investments and in the end the business case. The aid makes it possible for the beneficiary to realise the project. Therefore, a financial direct grant is the only instrument which changes the behaviour of the beneficiary in such a way that the project will be realised and the environmental impact will be reached.

47. The only theoretical alternative to the planned subsidies would be to encourage the greenhouse farmers with subsidies for building greenhouses that would deliver an environmental benefit. However, part of the areas are green fields, which means that there are as of yet no greenhouse farmers that own the land on which the greenhouses will be built and the areas are very remote from the OCAP-grid which makes investments even more unattractive. As a result, there are no guarantees of achieving the environmental goals. Once the greenhouses have been built with a CHP or boiler, it will be financially less attractive for the farmers to build a pipeline grid connecting the greenhouses.

48. In Noord-Holland several concentrated greenhouse areas exist. Only Greenport Aalsmeer is nearby the existing OCAP grid. For the other areas local mini grids will be developed, because the distances are long and the connection of these areas is not feasible.

49. Publicly exploiting the deliverance of external CO2 to the greenhouses, would involve higher interference with the greenhouse and energy market whilst there would be no guarantee that a public company would act only on market terms acceptable to a private investor. Indeed, even if a publicly owned company was to be set up for that purpose, it can be excluded that it could start operations without a similar subsidy for the initial investment, in conditions similar to the notified measure.

50. The direct subsidies to the infrastructure operator OCAP offers a greater guarantee for reaching the environmental goals and doing so in a way that is efficient and transparent. It paves the way for investments in renewable energy supply, since the farmers would not need to produce CO2 by means of CHP or boiler. It appears, therefore, that the envisaged aid in the form of direct grants constitutes an appropriate instrument to achieve the desired CO2 reductions.

Incentive effect

51. According to point 145 EEAG, State aid must have an incentive effect. The incentive effect is the causal relation between the granted State aid and a change in the behaviour of the beneficiary that results in a higher level of environmental protection. In that regard it can be noted that confirmed in line with point 49 EEAG the aid will be granted to the project under the condition that they have not been started prior to the submission of the applications for the aid to the national authorities. Furthermore, in line with provision (57) EEAG the business case do not provide for a sufficient incentive to build the infrastructure project without the aid, with the aid the project will have sufficient returns on investment (although each investor has its own

criteria which have to be met). It can therefore be concluded that the envisaged aid measures provide for the necessary incentive effect.

52. The market does not provide enough incentives for the recipient to invest. The infrastructures are costly, the revenues for CO2 are low and the project are known to have the specific risk of delay in the development of the greenhouse areas. Without aid the internal rate of returns (IRR) are too low and the project are not financeable. Therefore OCAP CO2 BV will not invest without aid. When raising the price for the offtake of CO2 is expected that growers will take less CO2 and in effect there will not be enough market volume left to justify the project.

53. The profitability of the **project** in terms of the internal rate of return (IRR) without state aid is [redacted]% (before taxes) over the time horizon by which the investment is fully depreciated (15 years). This is too low for the shareholder to provide the risk capital to OCAP CO2 BV for this investment. This low IRR is primarily the result of the fact that an investment in a compression unit at the location Alco is necessary in conjunction with the length of the transportation pipeline connecting to the current transportation pipeline of OCAP CO2 B.V. With the state aid of €4 million the IRR will increase to the hurdle rate for the investor of [redacted]% (before taxes). The decision for the equity investment by the beneficiary is based on a cut-off rate (i.e. minimum return rate) of an IRR of [redacted]%. With an investment subsidy, OCAP is prepared and capable of facing the investment and exploitation risks that are inevitably associated with this project and a positive investment decision from parent company Linde Gas is expected.

54. With aid the project become financially viable and therefore the aid measure provide the incentive necessary for OCAP CO2 BV to invest. Attached are calculations of the business case.

55. The greenhouses will use CO2 from OCAP CO2 BV for an affordable price instead of producing their own (low quality) CO2 using natural gas.

    The prices that have been used to investigate the business case are based on the experience of selling CO2 by OCAP CO2 BV in the existing situation as well as on the range of prices greenhouse growers are willing to pay for the production of CO2. Prices are aimed to be as high as possible in light of the benefits for the grower described below and in light of the necessary scope of supply to make the project feasible. To describe the incentive for the growers to change his behaviour, the growers are divided in two categories:

- *Growers using cogeneration or a boiler*
  With the external CO2 supplied the growers can optimize the operation of their cogeneration or boiler facility. It secures that the cogeneration or boilers only have to be used when heat is needed and not for the sole purpose of producing CO2 (“summer heating”). It also enables the greenhouses to operate their cogeneration more flexible and use the cogeneration mainly during peak moments when the produced electricity is worth most. This leads to the saving of natural gas as well as the production of electricity at the most favourable moments. Savings vary with the varying prices for (used) natural gas and (produced) electricity (cogeneration) as well as with the efficiency and technical constraints of the greenhouse energy system to operate flexibly (size of the heat buffer, etc.). See also the description of the counterfactual situation below for an overview of the current costs of CO2 alternatives for growers in comparison with the sales prices that OCAP CO2 BV uses.

  Next to these savings, the growers appreciate the quality of the CO2 and the possibility to use more CO2 than before. Both enable the growers to enhance their crop growth. The realised production benefits are difficult to quantify as production figures depend on a number of factors like the realized CO2 concentration, amount of (sun)light, temperature, water gift, fertilizers, growth strategy, etc.

- *Growers using renewable energy*
  The incentive for a grower to switch to renewable energy is not solely provided by the availability of CO2. But these growers depend entirely on “external” sources of CO2 and the availability of affordable CO2 is therefore a prerequisite. To make the switch, the external CO2 in combination with the renewable energy needs to be competitive with the energy and CO2 produced with common cogeneration facilities. The results of this assessment will vary from grower to grower and depend also on the type of renewable energy used, but, for example, the first greenhouses in the Netherlands using geothermal heat where realised using OCAP CO2 BV’s CO2 to cover

the total need for CO2. This proves that the availability of external CO2 can stimulate growers to make the switch to renewable energy.

Counterfactual situation

56. In the counterfactual situation, OCAP CO2 BV will not invest in this project. OCAP CO2 BV will not purchase extra CO2 from Alco group and will not sell this CO2 to growers. The growers in the greenhouse sector will keep on using natural gas in their cogeneration system (most case) or their boiler (some case) to produce the amount of CO2 required for their production.

57. The costs to produce CO2 using a boiler also depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. The costs of CO2 without the usage of heat are some 70-80 EUR/ton at the current prices for natural gas. When the heat can be used, the costs are close to zero.

58. The costs of producing CO2 using a cogeneration system depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. It also depends on whether this production is during peak or during off-peak hours as this determines the value of the produced electricity. The costs of CO2 without the usage of heat are between 30 and 60 EUR/ton at the current prices for natural gas and electricity.

59. The only current alternative, instead of producing CO2 from natural gas, is to purchase liquid CO2 delivered by truck. The price of liquid CO2 starts at around 70 EUR/ton. This is not competitive to the alternatives. This price also prevents growers from switching to renewable energy.

60. By comparison, the current sales prices for OCAP CO2 BV lie between [redacted] and [redacted] EUR/ton depending on the purchase volume. There is no market, other than existing supply by OCAP CO2 BV in other greenhouse areas. Therefore no market price can be defined, other than the price OCAP CO2 BV uses in the current supply areas.

61. In previous cases the average sales prices were: Zuidplaspolder: [redacted] EUR/ton, PrimA4a: [redacted]/EUR/ton.

62. For the case at hand the estimated average sales price is [redacted] EUR/ton to the greenhouse growers.

An indication of these costs is presented in the table below:

	Cost of CO2 [EUR/ton]
Cogen or boiler, use of heat	[redacted]
Cogen, no use of heat	[redacted]
Boiler, no use of heat	[redacted]
Liquid CO2	[redacted]
OCAP CO2 BV	[redacted]

Proportionality - Eligible Costs

63. According to (149) EEAG the eligible costs are determined as the extra investment costs as established in point (18). In the case at hand the costs of achieving the common interest objective can be identified in the total investment costs as separate investments, because the investments are readily identifiable "add-on components" to pre-existing facilities. Therefore the costs of the separate investment constitute the eligible costs.

64. All growers own a cogeneration system and/or a gas fired boiler for heating purposes, CO2 production (as part of the flue gases) and, in case of cogeneration, to cover their electricity demand or to supply of electricity to the grid. In the current and counterfactual situation the growers in the greenhouse sector thus use natural gas in these energy systems to produce the amount of CO2 required for enhancing their production rate and quality. The investment in these energy systems (for existing or new greenhouses) does not change as a result of the project. Therefore, the investments in the project are 100% additional. There is no reasonable alternative investment for producing CO2 next to using their own existing energy system.

65. The greenhouses do not avoid an investment in local facilities. The growers avoid summer heating, but they still need their production facilities to produce heat for their greenhouses during winter. For renewable heating the situation arises that geothermal sources are stopped in summertime and the cogeneration will be used to produce heat and CO2. A cogeneration system has three functions: production of heat, electricity and CO2. During summer the production of heat is a by-product, which is not needed and will be destroyed. Also, the investment in a cogeneration system does not change as a result of the project. The growers still need the same amount of heat during winter and/or the same amount of CO2 and heat during summer.

Aid Intensity

66. The Commission has generally accepted in the past an aid intensity of 50% for investments into transport infrastructure and for investments into gridlines[1].

67. The Commission has also accepted an aid intensity of 60% for investments into networks for district heating and cooling[2].

68. (68) EEAG: environmental and energy aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective aimed for.

69. (69) EEAG: as a general principle, aid will be considered to be limited to the minimum necessary if the aid corresponds to the net extra cost necessary to meet the objective, compared to the counterfactual scenario in the absence of aid. The net extra cost is determined by the difference between the economic benefits and costs (including the investment and operation) of the aided project and those of the alternative investment project which the company would carry out in the absence of aid, that is the counterfactual scenario. Without aid OCAP would never invest in an alternative project, because of the hurdle rate of the company. Also, the growers would not make additional investments for producing CO2. Therefore, the investments are 100% additional.

70. The aid intensity in Annex 1 EEAG states that for district heating infrastructure this can be 100% of the eligible costs.

71. Section 3.2.5.3. EEAG sets additional conditions for individually notifiable investment and operating aid, which in our opinion could be applicable in the case at hand.

72. (84) EEAG: as a general rule, individually notifiable aid will be considered to be limited to the minimum if the aid amount corresponds to the net extra costs of the aided investment, compared to the counterfactual scenario in the absence of aid. All relevant costs and benefits must be taken into account over the lifetime of the project. In the view of the Dutch authorities the general rule cannot be applied, since there is no counterfactual situation.

[1] E.g. the propylene gridline case C 67 to C 69/2003 (ex N355/03, N400/03 and N473/03), Commission decision of 02.03.2005 (point 55).
[2] E.g. State aid case N584/2008, Commission decision of 18.06.2009 (aid intensity at most 60%, point 64).

73. As stated before, there is no counterfactual scenario and therefore in the case at hand (85) EEAG could be used: if no specific alternative project can be identified as a counterfactual scenario, the Commission will verify whether the aid amount exceeds the minimum necessary to make the aided project sufficiently profitable, for instance whether it increases its IRR beyond the normal rates of return applied by the undertaking concerned in other investment project of a similar kind. When that benchmark is not available, the cost of capital of the company as a whole or rates of return commonly observed in the industry concerned may be used for that purpose. The benchmark is available and is equal to the benchmark used in (N208/2010) and (SA.48816).

74. The requested aid amounts are needed to increase the IRR to the normal rate of return applied by the beneficiary in former investment project.

75. (86) EEAG: the Member State should provide evidence that the aid amount is kept to the minimum. Calculations used for the analysis of the incentive effect can also be used to assess whether the aid is proportionate. The Member State must demonstrate the proportionality on the basis of the documentation referred to in paragraph (62). This documentation has been attached to this document and consists of cash flow-analysis of the project.

76. (62) EEAG: the Member States are, in particular, invited to rely on contemporary, relevant and credible evidence including, for example official board documents, credit committee reports, risk assessments financial reports, internal business plans, expert opinions and other studies related to the investment project under assessment. Documents containing information on demand forecasts, cost forecasts, financial forecasts, documents that are submitted to an investment committee and that elaborate on various investment scenarios, or documents provided to the financial institutions could help to verify the incentive effect. This documentation has been attached to this document

77. The requested state aid for the project of EUR 4 million (NPV is EUR 3,843,478) is 14% of the investment costs and 96.4% of the funding gap. In the PrimA4a case this was 99.3%. The funding gap is EUR 3,987,431

Distortion of Competition and Balancing Test

78. The aid will be granted by a (sub) national authority and thus by the State through State resources within the meaning of the Treaty. It distorts competition by selectively favouring the company OCAP that chooses to invest in the project.

79. The main competitors in the market are suppliers of liquid CO2. Although the shareholder of OCAP CO2 B.V. operates in a competitive market, no other competitors are interested in the realisation of a CO2 grid since the initial investment in a primary pipeline form industry to greenhouses is much too high to provide for reasonable returns on investment. The market for the transport of gaseous CO2 is by definition bound to the location of the pipelines and therefore local by nature. Therefore the effect on trade between member states is limited. Also, considering the structure of the market, the limited availability of transport facilities (pipelines and compression equipment) as well as the substantial investments required for entrance to the market it is not expected that competitors would enter this within the foreseeable future. There are indirect competitors who deliver liquid CO2 by truck. However, costs for liquid CO2 is substantially higher than gaseous CO2 delivered by pipeline. Therefore, without the ability to use gaseous CO2 form OCAP CO2 BV most greenhouse undertakings will produce their own CO2. Although OCAP CO2 BV operates in a competitive market, there are no competitors active on the market of supplying CO2 using a pipeline in this area.

80. The benefits for the beneficiary of reusing the CO2 over the lifetime of the investments are not such that the extra environmental costs can be recouped even with aid.

81. The benefits for the grower are enhanced crop growth and better quality of crops. Because of this advantage they are willing to pay the CO2 prices resulting from this project.

82. There is no competitive pressure for the growers to maintain a high level of environmental protection. The “carbon footprint” is still no important factor in the market for horticultural products.

83. As far as he Dutch authorities are aware, there are currently no ongoing negotiations at Community level to introduce new or higher mandatory standards.

84. The project face the risk of a slow development of new greenhouses in the areas. Hence, the purchase volume in the first years of operation could be lower than foreseen. This can lead to a lower cash flow.

85. Our assessment of the distortion on competition is that it is limited since the nature of the product market involved and the relative high risks and costs of capital for initial investments. This makes it not attractive for competitors to enter this new market. The aid measure do not affect the market failure in such a way that competition will severely be distorted.

2. CONCLUSION

86. In short, in our opinion the OCAP CO2 BV CO2-project contributes to both the national and European environmental goals, without disproportionally disturbing trade on the internal market.

87. The project will lead to considerable energy savings, while at the same time reducing the emission of CO2 gas into the atmosphere to a great extent. Moreover, it reduces the CO2 emissions that are produced by the production of the renewable fuel bio-ethanol.

88. In the opinion of the Dutch authorities, it can thus be concluded that the aid for the construction by OCAP CO2 BV of infrastructures for the off-take of waste CO2 from a bioethanol plant and delivery of this CO2 to greenhouses for crop growth purposes is to be approved in analogy to the Guidelines on State aid for Environmental protection and Energy (2014-2020).

89. The Dutch authorities therefore kindly request the Commission to find the aid measure to be compatible with the common market pursuant to Article 107(3) (c) of the EC Treaty.

Preliminary questions

All cases

1. How much energy is needed to capture the CO_2 from the suppliers (HVC, Meerlanden - please provide separate figures for the HVC biogas plant and the Meerlanden plant), and what impact does this have on the environmental benefits of the CO_2 capture and supply to greenhouses? For HVC and Meerlanden, please provide annual CO_2 emissions linked to the electricity consumption resulting from the CO_2 capturing from the HVC biogas plant and the Meerlanden plant?

[redacted]

2. Do the calculations for emissions savings made by avoiding the need for greenhouses to create their own CO_2 take into account the emissions needed to actually capture, transport, and re-evaporate the CO_2? If not, please include them into the calculations of the CO2 emission savings.

[redacted]

SA.51335 (Aid to OCAP – Alton, AgriportA7, Grootslag)

3. Please provide a comparison of the environmental implications of supplying gaseous CO_2 to greenhouses by way of (i) pipeline, direct from the CO_2 source to the greenhouses, and (ii) the means proposed in this project (i.e. piping CO_2 to the liquefier, liquefaction, transport by truck to the mini-grids, re-evaporation, input to mini-grids). In particular, please indicate whether emission savings are reduced by providing CO_2 by way of method (ii), rather than method (i).

[redacted]

4. As discussed, we would like to better understand the potential impact of this project on the market for liquid CO_2. In particular, we wonder whether providing aid to OCAP for a large CO_2 liquefier could grant it a competitive advantage over suppliers of liquid CO_2, should OCAP/Linde use the liquefier to supply the liquid CO_2 market. In that regard, please explain, with reasons, whether you consider the granting of State aid for this project would provide OCAP/Linde with a competitive advantage over competing suppliers of liquid CO_2. In particular, please provide information on the following:
   - the number and identity of providers of liquid CO_2 to greenhouses in the Netherlands;
   - whether there is a market for supply of liquid CO_2 to greenhouses beyond the Netherlands, and, if so, where;
   - in case there is such a market, whether providers of liquid CO_2 in the Netherlands (such as OCAP/Linde) are also active in that market, or whether it is feasible that they could enter that market[1];
   - whether liquid CO_2 supplied to greenhouses may also be supplied to other industries, for example, producers of beer or sparkling water; and
   - whether there are any limiting factors that would prevent OCAP from using the liquefier to compete with suppliers of liquid CO_2.

   Please note that this list is not exhaustive, and you should provide, in addition, any other information which you consider to be relevant.

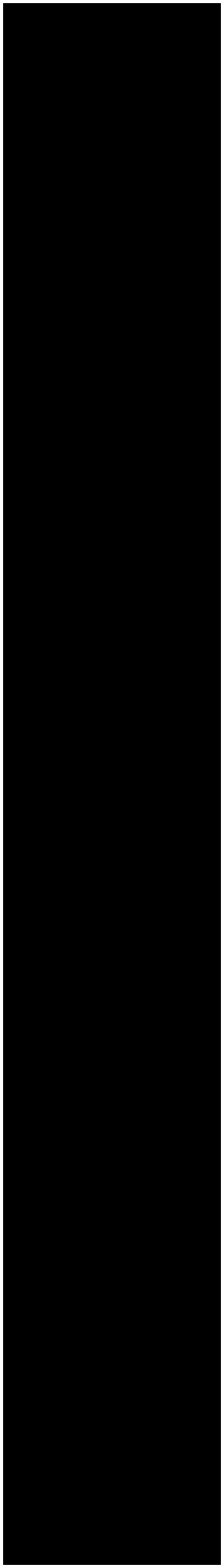
[redacted]

[1] In this regard, please note that the Commission has found that Belgium, the Netherlands, and Luxembourg should be considered as one geographic market for the supply of liquid CO_2 (Merger Case M.8480 Praxair/Linde)

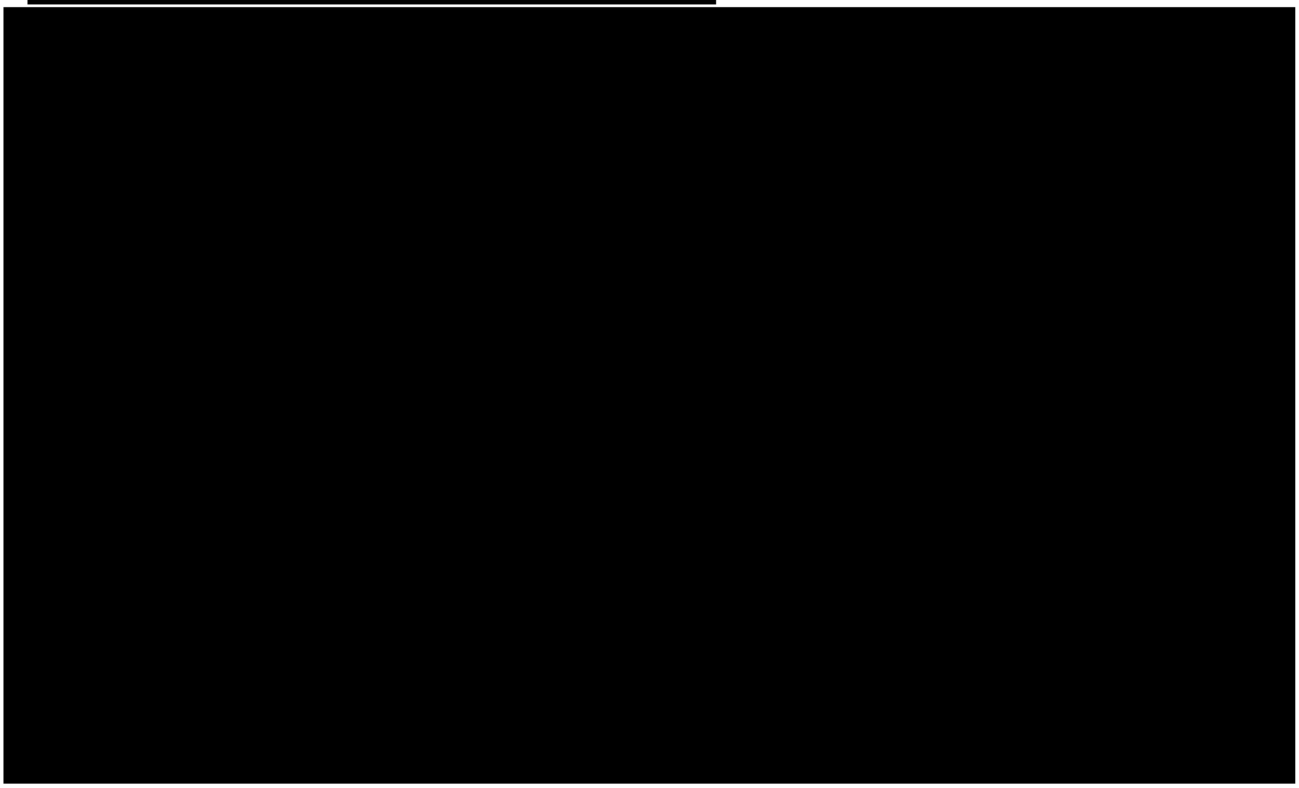
[2] http://www.airproducts.com/Company/news-center/2018/02/0215-air-products-to-acquire-leading-european-co2-business-acp.aspx

[redacted]

[redacted]



Source VFIG



24-09-2018: Source of the data is Essenscia, part of the Belgische Federatie Chemische Industrie. They register on behalf of all gas suppliers in Belgium the volumes and report back the total market. It is estimated that the volumes in DryIce and CO2 cylinders are around 10.000 ton per year.

SA.51337 (Aid to HVC for CO_2 capture and pipeline)

5. Please submit the NPV calculation of the HVC project in Excel format, including the underlying formulae.
   See attachment.

6. In the description of HVC's operating costs, there are significant electricity costs. Where does HVC procure the electricity, and on the basis of which type of contract? Please provide the detailed calculation of the electricity costs and indicate the underlying assumptions in calculating such costs.
   With two large Waste-to-Energy plants and a biomass power plant, the HVC group is a net producer of electricity. Also, HVC has its own energy company to sell and buy electricity and has a program responsibility in the Dutch electrical power structure. As price for the required electrical power for CO2 capture we therefore calculated on the basis of the market production price (APX) which was at the moment of our original subsidy request (€ 40 / MWhe). In addition HVC will have to pay taxes (EB and ODE) on the electricity consumed (€ 24,84 / MWhe), the latter being calculated as follows:

Tarieven 2016	Energiebelasting (EB)		Opslag Duurzame Energie (ODE)				
0-10 MWh	€	104,580	€	13,200			
10-50 MWh	€	52,740	€	18,000			
50-10.000 MWh	€	14,040	€	4,800			
>10.000 MWh	€	1,160	€	0,194			
Load			MWe				
bedrijfstijd			uur/jaar				
Totaal elektriciteit		511	MWhe / jaar				
EB+ODE	Tarief		te betalen EB & ODE				
0-10 MWh	€	117,780	€	1.178			
10-50 MWh	€	70,740	€	2.830			
50-10.000 MWh	€	18,840	€	8.685			
>10.000 MWh	€	1,354	€	-			
			€	**12.693**	**(gemiddeld:**	**€ 24,84**	**per MWh)**

Summary of the calculation: (€40/MWhe + €24.84/MWhe) * 511 MWhe/year ≈ €33,000/year

7. In the description of HVC's operating costs, there are significant maintenance costs. How were those costs computed and what do they include?
   The maintenance costs are calculated as being annually [redacted]. The latter figure is restricted to the wear-sensitive parts of the CO2 capture installation only.

8. The project costs include distribution pipelines to bring CO_2 from HVC to the greenhouses. Will these pipelines be owned by HVC or ECW? How much of the "engineering and project management" costs relate to the pipelines, rather than the CO_2 capture?
   [redacted]

9. We note that the lifetime of the HVC project is set at 12 years, the reason for which being the horizon of the Dutch SDE+ subsidy scheme, relating to the biogas installation. Can you confirm that the installation would stop operating after 12 years? If not, please provide a sensitivity analysis

(NPV) for the depreciation period of the expected lifetime of the installation. [redacted]

10. What is the duration of the CO_2 supply contract concluded between HVC and ECW, and can the supply price vary within the term of that contract? Is it an exclusive contract, which prevents HVC from supplying CO_2 to other buyers?
[redacted]

11. Apart from ETS, is HVC subject to any other constraints in terms of CO_2 emissions (linked to environmental legislation or to SDE+)?
ETS does not apply to HVC. In Europe there are targets set for CO2 emission reductions for non ETS industries. These targets are yet to be implemented in member states.

12. At what price will the CO_2 purchased from HVC be sold to the greenhouses? Please demonstrate that the price difference between the purchase price from HVC and the selling price to greenhouses is not leading to any excessive profit for ECW or the greenhouses.
The business case has been calculated on the basis of a price of € [redacted] per ton of CO2. Naturally we don't have knowledge of contracts of ECW with other parties, but on average the price of CO2 for Dutch Greenhouses is about € [redacted] per ton. This price is derived from producing a ton of CO2 by burning natural gas through CHPs.
The € [redacted] per ton margin covers the costs for ECW for transport, distribution and maintenance of the grid before the CO2 is actually in the greenhouse.

13. Over the last 3 years, what has been the price usually paid by ECW for liquid CO_2?
The average costs for ECW over the last 3 years for liquid CO2 are € [redacted] /ton. This includes purchase (fixed and variable) and distribution costs.

SA.51338 (Aid to Meerlanden for CO_2 capture and pipeline)

14. Please submit the NPV calculation of the Meerlanden project in Excel format, including the underlying formulae.
See attachment

15. In the description of Meerlanden's operating costs, there are significant electricity costs. How were these computed? Where does Meerlanden procure the electricity and on the basis of which type of contract? Please provide the detailed calculation of the electricity costs, and indicate the underlying assumptions in calculating such costs.
When in operation the installation will consume [redacted] KWh per ton CO2. As price for the required electrical power for CO2 capture we calculated on the basis of € [redacted] /Kwh (including all costs). Meerlanden has a 5-year contract with Greenchoice with a fixed tariff for 2019.

16. In the description of Meerlanden's operating costs, there are significant maintenance costs. How were those costs computed and what do they include?
Maintenance costs have been calculated by an external supplier of biogas equipment [redacted]. These costs contain preventive, regular and retrofitting maintenance. The average costs are calculated as € [redacted] per year.

17. What is the duration of the CO_2 supply contract concluded between Meerlanden and OCAP, and can the supply price vary within the term of that contract? Is it an exclusive contract, which prevents Meerlanden from supplying CO_2 to other buyers? Do the OCAP supply contracts usually contain exclusivity provisions?

[redacted]

18. What is the IRR required by Meerlanden for operation of the biogas installation, as opposed to the CO_2 capture project? Please justify in detail the difference between both IRRs. Please also indicate the financing structure of the Meerlanden project (own funds/debt financing). Please also explain the considerations that led to the conclusion that the CO_2 capture project would be riskier than the biogas project.
The IRR for the biogas plant was [redacted]% because Meerlanden received a municipal guarantee. The biogas plant has a also lower risk because the biomass input is covered by long-term contracts with, among others, share-holding municipalities. In addition, the full sales of green gas through the SDE+ subsidy are fully covered for a period of 12 years.
The CO2 project has more uncertainty in the sales to OCAP, who in turn supplies greenhouse horticulture. The sales depend entirely on the demand from greenhouse horticulture. In addition, OCAP demands a maximum of [redacted]% of the available CO2 from Meerlanden, with less than [redacted]% being requested in the first 3 years. The CO2 project therefore has a higher risk and therefore a higher IRR ([redacted]%). The project will be financed with equity.

19. Apart from ETS, is Meerlanden subject to any other constraints in terms of CO_2 emissions, (linked to environmental legislation or to SDE+)?
No

20. At what price will the CO_2 purchased from Meerlanden be sold to the greenhouses and ECW?
OCAP sells the CO2 against €[redacted]/ton.

21. Please demonstrate that the price difference between the purchase price from Meerlanden and the selling price to greenhouses does not lead to any profit for ECW or the greenhouses.
ECW is not a party in this project. The business case of OCAP shows that it will reach the hurdle rate of [redacted]%. See the answer to question 22: the CO2 will be sold against market prices and therefore this will not lead to any profit for the greenhouses.

22. Please provide the IRR calculation of the OCAP-Meerlanden pipeline connection in Excel format, including the underlying formulae.
See attachment

23. We note that the Meerlanden project is set at 12 years. Could you explain more in detail why the capturing equipment would have the same technical lifetime as the biogas installation itself? Why would it be subject to the same technical constraints?

[redacted]

Notification of State aid to OCAP

Date: 02/10/2018

1. GENERAL

Description of the aid

1. The primary objective of the aid measure is to increase environmental protection in several horticultural areas in the province Noord-Holland (NL) by reducing the use of primary energy sources for conventional forms of CO2 generation for horticultural processes. This will be achieved by transporting CO2 from industrial sources and biomass digesters to growers with a CO2 demand. Investments in CO2 capturing and infrastructure are needed to realise this objective.

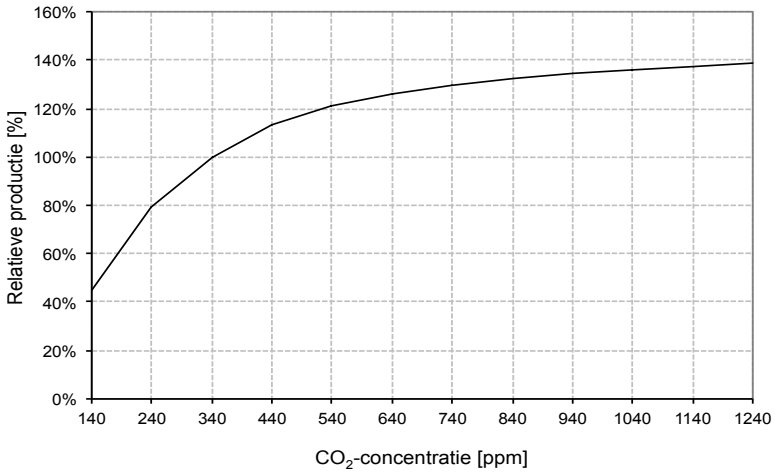
2. The Dutch authorities want to reduce CO2 emissions in order to increase environmental protection and reach its COP21 targets. The aim of this aid is to enable greenhouses to save on the use of natural gas by switching to industrial and biomass waste CO2. The Dutch authorities expect the measure to result in CO2 reductions with at least 37.5 kton and probably 75 kton per year.

3. The Dutch authorities will grant EUR 4 million for the construction by OCAP CO2 BV of an infrastructure for the off-take of waste CO2 from an existing bioethanol plant and delivery of this CO2 to greenhouses, where it is used to enhance crop growth instead of using (the CO2 in) flue gases by burning natural gas. The project requires an investment in compression and infrastructure of EUR 27 million by OCAP CO2 BV which is found to be economically not feasible without investment aid.

Description of the project

4. The Greenports Aalsmeer and Noord-Holland Noord are one of the largest horticultural centres in the Netherlands. The province of Noord Holland and the municipalities have set an agenda for the modernisation and restructuring of the Greenports. One of the main objectives is to provide for the establishment of sustainable conditions such as a CO2 and a heat network.

5. CO2 is necessary for the growth of plants and an important production factor in greenhouse horticulture. The higher the CO2 concentration in the air, the better the plants will grow. Improving plant growth translates in higher yields and efficient use of resources such as energy and space. The effect of the CO2 concentration on plant growth, and therefore production in the greenhouse, is shown in the graph below. Production in this graph is set at 100% at the CO2 concentration in the open air (approx. 340 ppm).



6. Most CO2 is needed in the summer when the plant grows best under the influence of the (sun) light. At that moment, "fresh" CO2 is supplied to the outside air by ventilation via the windows, which are then open in the greenhouse. However, this is insufficient to allow the plant to grow optimally. If CO2 is not actively dosed, the CO2 concentration drops to (far) below the external value of 340 ppm. In practice, examples are known in which the concentration falls back below 200 ppm. The plant then decelerates strongly in growth, as the graph shows, until the CO2 uptake by the plant is in equilibrium with the CO2 supplied by ventilation. The grower will actively dose extra CO2 to prevent a drop in the CO2 concentration and preferably achieve a concentration that is above the outside value. As soon as the concentration exceeds the external value, CO2 will be lost on balance through ventilation. The grower seeks the balance between extra growth and the costs of dosing extra CO2.

7. Traditionally, the grower uses the flue gases from his boiler or cogeneration plant to dose CO2. In the summer, the grower burns his boiler or cogeneration for this purpose, without the heat produced thereby being used; the "summer heating". This costs the grower money and burdens the environment. Sometimes liquid CO2 is also used, but due to the cost price this is mainly used in addition to or on top of the dosing of flue gases.

8. In the framework of the so called "Green Deal" between the Dutch national government and the Province of North-Holland and private companies amongst which HVC and OCAP CO2 BV, the intention to provide waste CO2 to greenhouses was expressed. A Green Deal is an informal public-private partnership in which parties express their intentions with regard to sustainable initiatives to remove certain barriers for these initiatives to be realised. In the Green Deal, these parties agreed to realize a source of high-quality CO2 (from flue gases) and a pipeline network for the distribution of CO2 to greenhouse horticulture companies in Noord-Holland with an economic return for the horticultural sector. The aforementioned parties work together and focus on fulfilling the conditions and the steps to be taken for both the CO2 transport network and the development of a way to filter out CO2 from flue gases.

9. In the official policy documents of the province Noord-Holland, the *Strategisch Beleidskader Economie Noord-Holland* (SBE) en *Uitvoeringsagenda Economie Noord-Holland* (UA) the policy on economic developments and the transition towards a circular and economy and a renewable energy supply are decided. For the horticultural sector the challenge is to switch form fossil fuels to waste heat and renewable energy sources (e.g. geothermal), which requires an alternative CO2 source instead of natural gas.

   In the *Beleidsagenda Energietransitie 2016-2020* the goals related to the transition to a sustainable energy supply have been set. The challenges are in the sectors built environment, industry and the horticultural sector. By using renewable sources and residual heat for energy supply, a lack of CO2 arises in greenhouses. CO2 is released during the heat production. Growers need that CO2 for the cultivation of their crops. Therefore CO2 will have to be brought into the greenhouse in an alternative different way. Collective infrastructure for heat (heat networks, geothermal energy) have therefore be combined with solutions for CO2 delivery

(capturing and purifying CO2 from our local industries and distribution via underground pipelines, for example).

10. Sustainable modernization of the greenhouse horticulture areas in the Greenports of North Holland means that there must be a sufficient CO2 supply.

11. The availability of waste CO2 from industry is an important prerequisite for this sustainable development in order to avoid summer heating and increase the energy efficiency of greenhouse production. But also because the use of renewable energy in greenhouses is only possible when the greenhouses have an “external” alternative for covering their demand for CO2 instead of using the flue gases from their cogeneration or boiler.

12. Since investments in a CO2 supply have a long payback period, the question is who will finance the funding gap in the start-up phase. The province is with restrictions willing to contribute to fund the gap for investments in CO2-capture and use-project.

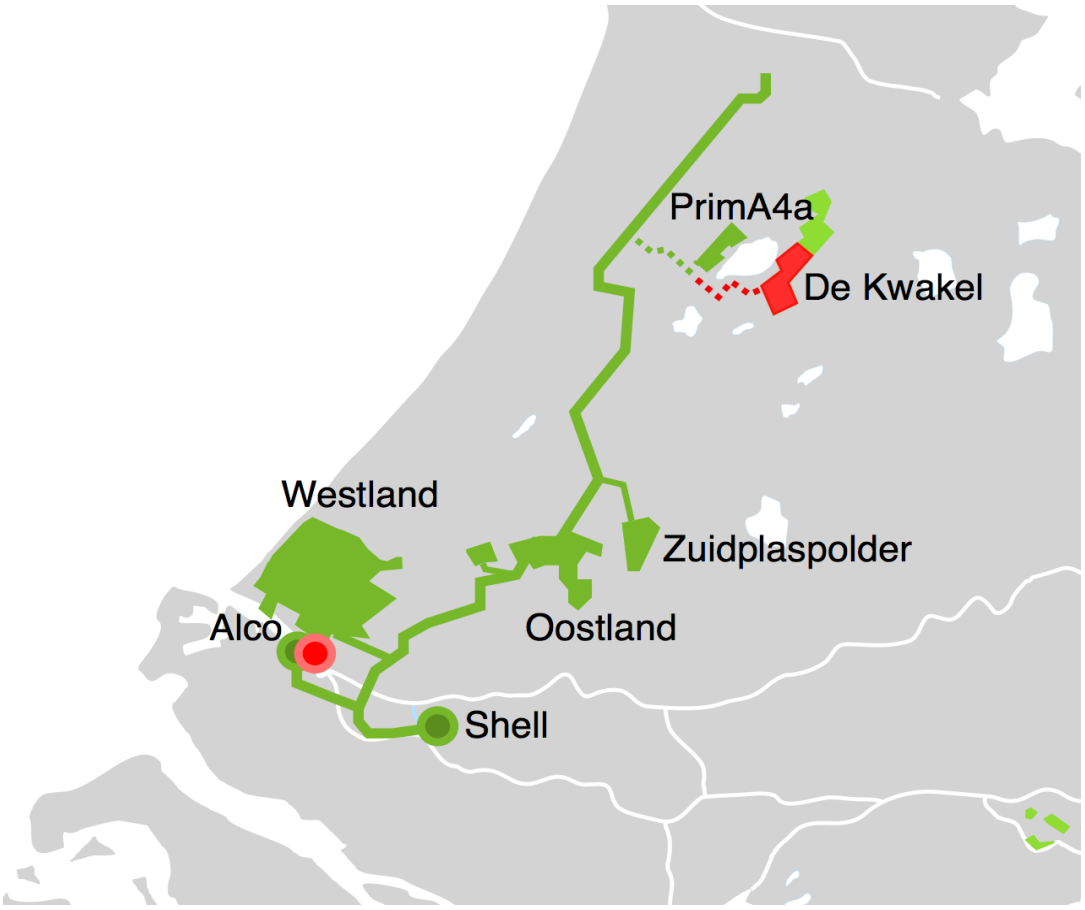
13. The authorities have committed resources of €8.5 million for the development of CO2 infrastructure for the greenhouse areas within Greenport Aalsmeer and Greenport Noord-Holland Noord.

    - Greenport Aalsmeer: horticultural area *De Kwakel* (300 hectare).

    - Greenport Noord-Holland Noord: *AgriportA7* (600 hectare existing and 360 hectare to be built), *Alton* (85 hectare) and *Het Grootslag* (140 hectare).

14. The province Noord-Holland has the intention to subsidize the investor OCAP CO2 BV for the realisation of a CO2-utilization project.

15. OCAP has the ambition to expand the supply of CO2 to greenhouse horticulture near De Kwakel (area in the Greenport Aalsmeer). The expansion of the CO2 supply involves an investment of approximately €27 million because, in addition to the network, an investment is also needed in a compressor station at CO2 supplier Alco to be able to source additional CO2 for the supply to greenhouse horticulture in De Kwakel. A relatively long transport pipeline is necessary, building on the transport pipeline to PrimA4a, to unlock De Kwakel. The investment in the connecting transport pipeline amounts to approximately €[redacted] million.



16. Because extra capacity will become available at the Alco source in 2020, expansion of the CO2 supply to De Kwakel (red in the figure above) will become possible. To this end, a new compressor station at Alco must be realized (red circle in the figure above). On the other hand, the transport infrastructure must be extended from the transport pipeline realized for PrimA4a and a distribution network must be built in order to be able to connect the greenhouses in De Kwakel.

17. The investment will be in state of the art technology which is not part of a Research & Development project.

18. The investment costs are:

• Compressor	[redacted]
• Transport pipeline Kwakel	[redacted]
• Reduction station	[redacted]
• Distribution pipelines	[redacted]
• Connections	[redacted]
• Engineering and project management	[redacted]
Total costs:	27,227,750

19. The environmental effect is in the end realised by the change in behaviour of the growers by using CO2 from OCAP CO2 BV instead of the use of natural gas to produce their own CO2. CO2 is commonly used in greenhouses: an increased CO2 concentration enhances crop growth. In the course of years, the dosing of CO2 has become an important production factor for growers. They currently produce their own CO2 using natural gas in a cogeneration system (most case) or gas fired boiler (some case). The aim is to realise energy savings in two ways:

(1) *Avoiding "summer heating".*
The key problem is that CO2 is mostly needed in the summer when heat demand is low. Because of the importance of CO2-dosing, growers use their energy systems to produce CO2 although the heat is not needed. This is called "summer heating".
The problem of "summer heating" is growing: much research effort is put into increasing the energy efficiency of greenhouses, for example in developing more energy efficient crop growth strategies. This reduces the demand for heat in summer even further. In buying the needed CO2 from OCAP CO2 BV, the growers can stop using their cogeneration system or gas fired boiler for the production of CO2 when heat is not needed.

0

(2) *Switching to renewable energy*
When greenhouses switch to renewable (geothermal) energy, they face a problem during summertime. Because of the large CO2-demand during summer they need to operate a CHP. Since the CHP produces heat, they tend to stop the geothermal source during summer. Supplying external CO2 prohibits the operation of CHP's during summer and enables the growers to operate the geothermal source year-round.

Therefore, the availability of affordable CO2 is an important prerequisite for the sustainable development of greenhouse areas. Large energy savings can be realised when the greenhouses switch to renewable energy. As a result the savings on CO2 for renewable energy-supplied greenhouses equal the supply of CO2.

20. By avoiding 'summer heating' the greenhouse growers can achieve an annual energy saving of approximately 21 million m3 natural gas. This avoids the emission of approximately 37.5 kton of CO2. In addition, external CO2 supply is an important precondition for the use of renewable heat (residual heat, geothermal heat, cold storage, etc.). The savings in natural gas consumption and CO2 emissions can therefore be significantly increased further. If a solution is found for renewable heat supply, for which a combination with a CO2 supply is necessary, a total of 42 million m3 of gas will be saved each year. This is equivalent to a reduction of 75 kton in the emissions of CO2.

21. Next to the energy savings described above, the availability of affordable CO2 from OCAP CO2 BV enables the growers to enhance crop growth even further due to the high quality of the CO2 and by dosing more CO2 than before. This also reduces the specific energy use per unit produced.

National Legal Basis

22. The national legal basis for the aid is the "Algemene Wet Bestuursrecht" which enables the authorities to provide subsidy to legal entities.

Beneficiary

23. The beneficiary is OCAP CO2 BV. OCAP CO2 BV is a full daughter of Linde Gas Benelux B.V. ("Linde"), a supplier of industrial gases. The state aid will be granted to OCAP CO2 BV and enables OCAP CO2 BV to develop the project. These are local project and it is not economically feasible to extend the infrastructure to other member states. OCAP CO2 BV will not, in any form, pass on the aid it receives. The shareholder of OCAP CO2 BV will not receive (a part of) the aid, as the aid is used to finance the necessary investments undertaken by OCAP CO2 BV. Since the compensation Shell and Alco Group receive equals their exploitation costs, Shell and Alco Group as such are not beneficiary of the state aid. Of course the growers will benefit from the project, otherwise they would not buy the CO2 supplied by OCAP CO2 BV. However, the growers are the end-consumers and no beneficiary of the aid as such.

Budget

24. The Dutch authorities notify an overall budget of €4 million spread over 4 years.

Aid instrument and Funding

25. The aid will be made available to the beneficiary in the form of a direct grant.

Duration

26. The Dutch authorities notify the aid for the period from 2019 until 2023. The aid will only be provided to OCAP CO2 BV subject to approval by the Commission.

Cumulation

27. The present aid for the OCAP-project could be cumulated with EIA (Energy Investment Deduction). This is a tax exemption meant to stimulate investments in energy reduction or renewable energy. EIA however contains no state aid as meant in article 107 (1) of the EU-Treaty: EIA is a generic measure and is open to all companies on an equal basis. See also Decision N266/2003.

ASSESSMENT

Introduction

28. We have examined the aid in accordance with article 107 (3) (c) of the EU-Treaty. In our view the assessment of the compatibility of the proposed measure could based on the case "Aid for CO2 delivery to Zuidplaspolder" (N208/2010) and "Environmental protection through residual CO2 delivery to greenhouse horticulture" (SA.48816). The compatibility should be assessed on the basis of the Treaty, in analogous application of the provisions of section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling, as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

    The similarities between this project and the abovementioned case are as follows:

    - There are sources of a waste utility (CO2) which in the counterfactual situation is emitted in the atmosphere and which utility will in these cases be delivered to third party consumers (the greenhouses).
    - The amount of energy used is not reduced by the company OCAP CO2 BV itself but the delivery of CO2 will reduce the amounts of primary energy used by the end consumers. Therefore the aim is also similar: to promote (external) primary energy savings.
    - There is the need for large investments in infrastructure (capturing the CO2, liquefaction of the CO2 and transporting the waste utility by pipelines and delivering it to end consumers).
    - The greenhouses face the same investment in heat generation in the counterfactual situation as in the 'state aid case'. They need to generate the same amount of heat and therefore have to invest in CHP's or renewable heat generation system with the same capacity.

Presence of State Aid Pursuant to Article 107 (3) Treaty on the Functioning of the European Union

29. A measure constitutes State aid under Article 107 (3) TFEU if it fulfils four conditions. Firstly, the funding stems from the State or from State resources. Secondly, the measure confers an advantage to certain undertakings or economic activities. Thirdly, the measure is selective. And fourthly, the measure affects trade between Member States and distorts or threatens to distort competition in the common market. The aid granted fulfils all the conditions mentioned above. The aid stems from State resources since it is funded by the Dutch federal budget. The aid confers an advantage because it provides a fund for an undertaking which this company would not obtain under normal market conditions. The aid is selective since it is granted only to one company. The aid has the potential to affect the trade between Member States and to distort competition because the beneficiary is active in the greenhouse sector, where trade between Member States takes place. The aid granted to the beneficiary thus constitutes state aid pursuant to Article 107 (3) TFEU.

Legality of the Aid

30. By notifying the measure before its implementation, the Dutch authorities have fulfilled their obligation according to Article 107 (3) of the EU Treaty. Any disbursements will only be made after the authorisation of the notified measure by the Commission.

Compatibility of the Aid with Article 107 (3) (c) TFEU

31. Under Article 107(3)(c) TFEU, aid to facilitate the development of certain economic activities or of certain economic areas may be considered to be compatible with the common market, where such aid does not adversely affect trading conditions to an extent contrary to the common interest.

32. The General Block Exemption Regulation (GBER) section 7 – Aid for environmental protection, section 4 – Aid for research and development and innovation and section 13 – Aid for local infrastructures both are not applicable, since the investment doesn't fulfil one of the two conditions in article 36.2: (a) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities by going beyond the applicable Union standards, irrespective of the presence of mandatory national standards that are more stringent than the Union standards; (b) it shall enable the beneficiary to increase the level of environmental protection resulting from its activities in the absence of Union standards. Neither does it fulfil the condition in article 56.7: Dedicated infrastructure is not exempted. Article 25 GBER is not applicable since the investments do not meet the definition of "industrial' research' of 'experimental development' as defined in points 85 and 86.

33. In our opinion the aid does not fall entirely into the scope of application of one or more guidelines.

34. However, in our opinion the assessment of the state aid for the case at hand should be based in analogous application of the Community guidelines on State aid for environmental protection and energy (hereinafter referred to as EEAG), section 3.4 EEAG, Energy efficiency measure, including cogeneration and district heating and district cooling as well as 3.2.5.3. EEAG, Additional conditions of individually notifiable investment and operating aid.

35. In (22) EEAG is stated that "These Guidelines provide the compatibility criteria for aid schemes and individual aid for environmental protection and energy objectives which are subject to the notification obligation pursuant to Article 108(3) of the Treaty." However, in (19) For the purposes of these Guidelines the following definitions apply:

    (1) ´environmental protection´ means any action designed to remedy or prevent damage to physical surroundings or natural resources by a **beneficiary's own activities**, to reduce the risk of such damage or to lead to more efficient use of natural resources, including energy- saving measure and the use of renewable sources of energy;

36. This condition is not fulfilled in the case at hand: the beneficiary of the aid is the network company OCAP CO2 BV which does not carry out any activities of environmental protection in the sense of aforementioned point 19 (1) EEAG. In the present case, the environmental effect of the aid would be realised by the change in behaviour of the greenhouses using CO2 from OCAP instead of the use of natural gas to produce their own CO2, thus leading to primary energy savings on the part of the end consumers which should in turn reduce CO2 emissions thus contributing to environmental protection.

37. Therefore, the present case falls outside the scope of EEAG but in our opinion should be assessed analogous to EEAG, similar to the approach used in (N208/2010) and (SA.48816).

Assessment directly under Article 107 (3) (c) TFEU

(1) Is the aid measure aimed at a well-defined objective of common interest (i.e. does the proposed aid address a market failure or other objective)?

(2) Is the aid well-designed to deliver the objective of common interest? In particular:

(a) Is the aid measure an appropriate instrument?
(b) Is there an incentive effect, i.e. does the aid change the behaviour of firms?
(c) Is the aid measure proportional, i.e. could the same change in behaviour be obtained with less aid?

(3) Are the distortions of competition and the effect on trade limited, so that the overall balance is positive?

Objective of common interest

38. The aid measure has to aim at a well-defined objective of common interest. An objective of common interest is an objective which has been recognised by the European Union as being in the common interest.

39. The aid measure aim at the *Resource-efficient Europe* Flagship initiative of the Europe 2020 Strategy. This flagship initiative supports the shift towards a resource-efficient, low-carbon economy to achieve sustainable growth. The aid addresses the objectives laid down in the Europe 2020 initiative: *Energy 2020*: 20% savings in energy. The aid also responds to the objectives of the *EU Energy Package*, i.e.: reduction of at least 20% in greenhouse gases (GHG) by 2020.

40. The environmental policy of the Dutch Government has been laid down in the “Klimaatagenda” (2013). The environmental policy of the province Noord-Holland has been laid down in the aforementioned Strategisch Beleidskader Economie Noord-Holland (SBE) en Uitvoeringsagenda Economie Noord-Holland (UA) Beleidsagenda Energietransitie 2016-2020.

41. The measure at hand aim at making better use of waste CO2 from industrial processes.To this end the measure support the construction of the necessary infrastructure to transport such CO2 to end consumers. The project is expected to lead to primary energy savings on the part of the end consumers, i.e. the greenhouses, which in turn should reduce CO2 emissions from fossil fuels, thus contributing to environmental protection. The EU institutions have recognised on many occasions that the protection of the environment and the reduction of CO2 emissions are in the common interest. In particular, the European Council made a commitment to achieve at least a 40% reduction in greenhouse gas emissions in 2030 as compared to 1990, at least 27% of total energy consumption from renewable energy in 2030 and at least a 27% increase in energy efficiency (the climate and energy package), and the European Parliament and the Council adopted in 2009 the corresponding legislation to meet these targets.

42. According to our calculations the measure in the end would achieve an annual reduction of CO2 emissions of at least 37.5 kton and probably 75 kton per year.

43. It can thus be concluded that the proposed measure aims at a well-defined objective of common interest.

Need for state aid: appropriate instrument?

44. There are no other Dutch aid measures which could be used to finance the project. MIA/Vamil (The "Aanwijzingsregeling willekeurige afschrijving en investeringsaftrek milieu-investeringen 2009", IENM/BSK-2015/232935) enables investors in CO2-capture investments to use the depreciation and investment deduction only if the criteria of GBER article 36 are met. Since this is not the case for the investments at hand, MIA/Vamil is not applicable.

45. Because of the contribution to the environmental goals of the Dutch government is it important for the Dutch authorities that the project will be established. The project is an example of increasing horticultural energy efficiency and energy savings which could be followed by other horticultural parties.

46. Most important obstacle for the realisation are the low revenues for the beneficiary. Granting the aid would raise the project return (IRR) of the investments and in the end the business case. The aid makes it possible for the beneficiary to realise the project. Therefore, a financial direct grant is the only instrument which changes the behaviour of the beneficiary in such a way that the project will be realised and the environmental impact will be reached.

47. The only theoretical alternative to the planned subsidies would be to encourage the greenhouse farmers with subsidies for building greenhouses that would deliver an environmental benefit. However, part of the areas are green fields, which means that there are as of yet no greenhouse farmers that own the land on which the greenhouses will be built and the areas are very remote from the OCAP-grid which makes investments even more unattractive. As a result, there are no guarantees of achieving the environmental goals. Once the greenhouses have been built with a CHP or boiler, it will be financially less attractive for the farmers to build a pipeline grid connecting the greenhouses.

48. In Noord-Holland several concentrated greenhouse areas exist. Only Greenport Aalsmeer is nearby the existing OCAP grid. For the other areas local mini grids will be developed, because the distances are long and the connection of these areas is not feasible.

49. Publicly exploiting the deliverance of external CO2 to the greenhouses, would involve higher interference with the greenhouse and energy market whilst there would be no guarantee that a public company would act only on market terms acceptable to a private investor. Indeed, even if a publicly owned company was to be set up for that purpose, it can be excluded that it could start operations without a similar subsidy for the initial investment, in conditions similar to the notified measure.

50. The direct subsidies to the infrastructure operator OCAP offers a greater guarantee for reaching the environmental goals and doing so in a way that is efficient and transparent. It paves the way for investments in renewable energy supply, since the farmers would not need to produce CO2 by means of CHP or boiler. It appears, therefore, that the envisaged aid in the form of direct grants constitutes an appropriate instrument to achieve the desired CO2 reductions.

Incentive effect

51. According to point 145 EEAG, State aid must have an incentive effect. The incentive effect is the causal relation between the granted State aid and a change in the behaviour of the beneficiary that results in a higher level of environmental protection. In that regard it can be noted that confirmed in line with point 49 EEAG the aid will be granted to the project under the condition that they have not been started prior to the submission of the applications for the aid to the national authorities. Furthermore, in line with provision (57) EEAG the business case do not provide for a sufficient incentive to build the infrastructure project without the aid, with the aid the project will have sufficient returns on investment (although each investor has its own

criteria which have to be met). It can therefore be concluded that the envisaged aid measures provide for the necessary incentive effect.

52. The market does not provide enough incentives for the recipient to invest. The infrastructures are costly, the revenues for CO2 are low and the project are known to have the specific risk of delay in the development of the greenhouse areas. Without aid the internal rate of returns (IRR) are too low and the project are not financeable. Therefore OCAP CO2 BV will not invest without aid. When raising the price for the offtake of CO2 is expected that growers will take less CO2 and in effect there will not be enough market volume left to justify the project.

53. The profitability of the **project** in terms of the internal rate of return (IRR) without state aid is [redacted]% (before taxes) over the time horizon by which the investment is fully depreciated (15 years). This is too low for the shareholder to provide the risk capital to OCAP CO2 BV for this investment. This low IRR is primarily the result of the fact that an investment in a compression unit at the location Alco is necessary in conjunction with the length of the transportation pipeline connecting to the current transportation pipeline of OCAP CO2 B.V. With the state aid of €4 million the IRR will increase to the hurdle rate for the investor of [redacted]% (before taxes). The decision for the equity investment by the beneficiary is based on a cut-off rate (i.e. minimum return rate) of an IRR of [redacted]%. With an investment subsidy, OCAP is prepared and capable of facing the investment and exploitation risks that are inevitably associated with this project and a positive investment decision from parent company Linde Gas is expected.

54. With aid the project become financially viable and therefore the aid measure provide the incentive necessary for OCAP CO2 BV to invest. Attached are calculations of the business case.

55. The greenhouses will use CO2 from OCAP CO2 BV for an affordable price instead of producing their own (low quality) CO2 using natural gas.

    The prices that have been used to investigate the business case are based on the experience of selling CO2 by OCAP CO2 BV in the existing situation as well as on the range of prices greenhouse growers are willing to pay for the production of CO2. Prices are aimed to be as high as possible in light of the benefits for the grower described below and in light of the necessary scope of supply to make the project feasible. To describe the incentive for the growers to change his behaviour, the growers are divided in two categories:

- *Growers using cogeneration or a boiler*
  With the external CO2 supplied the growers can optimize the operation of their cogeneration or boiler facility. It secures that the cogeneration or boilers only have to be used when heat is needed and not for the sole purpose of producing CO2 (“summer heating”). It also enables the greenhouses to operate their cogeneration more flexible and use the cogeneration mainly during peak moments when the produced electricity is worth most. This leads to the saving of natural gas as well as the production of electricity at the most favourable moments. Savings vary with the varying prices for (used) natural gas and (produced) electricity (cogeneration) as well as with the efficiency and technical constraints of the greenhouse energy system to operate flexibly (size of the heat buffer, etc.). See also the description of the counterfactual situation below for an overview of the current costs of CO2 alternatives for growers in comparison with the sales prices that OCAP CO2 BV uses.

  Next to these savings, the growers appreciate the quality of the CO2 and the possibility to use more CO2 than before. Both enable the growers to enhance their crop growth. The realised production benefits are difficult to quantify as production figures depend on a number of factors like the realized CO2 concentration, amount of (sun)light, temperature, water gift, fertilizers, growth strategy, etc.

- *Growers using renewable energy*
  The incentive for a grower to switch to renewable energy is not solely provided by the availability of CO2. But these growers depend entirely on “external” sources of CO2 and the availability of affordable CO2 is therefore a prerequisite. To make the switch, the external CO2 in combination with the renewable energy needs to be competitive with the energy and CO2 produced with common cogeneration facilities. The results of this assessment will vary from grower to grower and depend also on the type of renewable energy used, but, for example, the first greenhouses in the Netherlands using geothermal heat where realised using OCAP CO2 BV’s CO2 to cover

the total need for CO2. This proves that the availability of external CO2 can stimulate growers to make the switch to renewable energy.

Counterfactual situation

56. In the counterfactual situation, OCAP CO2 BV will not invest in this project. OCAP CO2 BV will not purchase extra CO2 from Alco group and will not sell this CO2 to growers. The growers in the greenhouse sector will keep on using natural gas in their cogeneration system (most case) or their boiler (some case) to produce the amount of CO2 required for their production.

57. The costs to produce CO2 using a boiler also depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. The costs of CO2 without the usage of heat are some 70-80 EUR/ton at the current prices for natural gas. When the heat can be used, the costs are close to zero.

58. The costs of producing CO2 using a cogeneration system depend on whether it is used to produce heat with CO2 as a by-product, or only to produce CO2. It also depends on whether this production is during peak or during off-peak hours as this determines the value of the produced electricity. The costs of CO2 without the usage of heat are between 30 and 60 EUR/ton at the current prices for natural gas and electricity.

59. The only current alternative, instead of producing CO2 from natural gas, is to purchase liquid CO2 delivered by truck. The price of liquid CO2 starts at around 70 EUR/ton. This is not competitive to the alternatives. This price also prevents growers from switching to renewable energy.

60. By comparison, the current sales prices for OCAP CO2 BV lie between [redacted] and [redacted] EUR/ton depending on the purchase volume. There is no market, other than existing supply by OCAP CO2 BV in other greenhouse areas. Therefore no market price can be defined, other than the price OCAP CO2 BV uses in the current supply areas.

61. In previous cases the average sales prices were: Zuidplaspolder: [redacted] EUR/ton, PrimA4a: [redacted]/EUR/ton.

62. For the case at hand the estimated average sales price is [redacted] EUR/ton to the greenhouse growers.

An indication of these costs is presented in the table below:

	Cost of CO2 [EUR/ton]
Cogen or boiler, use of heat	[redacted]
Cogen, no use of heat	[redacted]
Boiler, no use of heat	[redacted]
Liquid CO2	[redacted]
OCAP CO2 BV	[redacted]

Proportionality - Eligible Costs

63. According to (149) EEAG the eligible costs are determined as the extra investment costs as established in point (18). In the case at hand the costs of achieving the common interest objective can be identified in the total investment costs as separate investments, because the investments are readily identifiable "add-on components" to pre-existing facilities. Therefore the costs of the separate investment constitute the eligible costs.

64. All growers own a cogeneration system and/or a gas fired boiler for heating purposes, CO2 production (as part of the flue gases) and, in case of cogeneration, to cover their electricity demand or to supply of electricity to the grid. In the current and counterfactual situation the growers in the greenhouse sector thus use natural gas in these energy systems to produce the amount of CO2 required for enhancing their production rate and quality. The investment in these energy systems (for existing or new greenhouses) does not change as a result of the project. Therefore, the investments in the project are 100% additional. There is no reasonable alternative investment for producing CO2 next to using their own existing energy system.

65. The greenhouses do not avoid an investment in local facilities. The growers avoid summer heating, but they still need their production facilities to produce heat for their greenhouses during winter. For renewable heating the situation arises that geothermal sources are stopped in summertime and the cogeneration will be used to produce heat and CO2. A cogeneration system has three functions: production of heat, electricity and CO2. During summer the production of heat is a by-product, which is not needed and will be destroyed. Also, the investment in a cogeneration system does not change as a result of the project. The growers still need the same amount of heat during winter and/or the same amount of CO2 and heat during summer.

66. In our opinion proportionality means that the aid amount is limited to the minimum needed to incentivise the additional investment. This is primarily an economic assessment of the project. The aid amount is needed for the investor OCAP to meet the hurdle rate but does not exceed the needed amount.

67. The initial forecasted emissions savings of SA.51335 are higher, but the long-term plans are to extend the greenhouse area De Kwakel in the Aalsmeer area. In that case it is possible to connect the greenhouses to the OCAP grid without providing OCAP with additional aid. As an effect this will lead to additional emissions savings.

Aid Intensity

68. The Commission has generally accepted in the past an aid intensity of 50% for investments into transport infrastructure and for investments into gridlines[1].

69. The Commission has also accepted an aid intensity of 60% for investments into networks for district heating and cooling[2].

70. (68) EEAG: environmental and energy aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed to achieve the environmental protection or energy objective aimed for.

71. (69) EEAG: as a general principle, aid will be considered to be limited to the minimum necessary if the aid corresponds to the net extra cost necessary to meet the objective, compared to the counterfactual scenario in the absence of aid. The net extra cost is determined by the difference between the economic benefits and costs (including the investment and operation) of the aided project and those of the alternative investment project which the company would carry out in the absence of aid, that is the counterfactual scenario. Without aid OCAP would never invest in an alternative project, because of the hurdle rate of the company. Also, the growers would not make additional investments for producing CO2. Therefore, the investments are 100% additional.

72. The aid intensity in Annex 1 EEAG states that for district heating infrastructure this can be 100% of the eligible costs.

[1] E.g. the propylene gridline case C 67 to C 69/2003 (ex N355/03, N400/03 and N473/03), Commission decision of 02.03.2005 (point 55).
[2] E.g. State aid case N584/2008, Commission decision of 18.06.2009 (aid intensity at most 60%, point 64).

73. Section 3.2.5.3. EEAG sets additional conditions for individually notifiable investment and operating aid, which in our opinion could be applicable in the case at hand.

74. (84) EEAG: as a general rule, individually notifiable aid will be considered to be limited to the minimum if the aid amount corresponds to the net extra costs of the aided investment, compared to the counterfactual scenario in the absence of aid. All relevant costs and benefits must be taken into account over the lifetime of the project. In the view of the Dutch authorities the general rule cannot be applied, since there is no counterfactual situation.

75. As stated before, there is no counterfactual scenario and therefore in the case at hand (85) EEAG could be used: if no specific alternative project can be identified as a counterfactual scenario, the Commission will verify whether the aid amount exceeds the minimum necessary to make the aided project sufficiently profitable, for instance whether it increases its IRR beyond the normal rates of return applied by the undertaking concerned in other investment project of a similar kind. When that benchmark is not available, the cost of capital of the company as a whole or rates of return commonly observed in the industry concerned may be used for that purpose. The benchmark is available and is equal to the benchmark used in (N208/2010) and (SA.48816).

76. The requested aid amounts are needed to increase the IRR to the normal rate of return applied by the beneficiary in former investment project.

77. (86) EEAG: the Member State should provide evidence that the aid amount is kept to the minimum. Calculations used for the analysis of the incentive effect can also be used to assess whether the aid is proportionate. The Member State must demonstrate the proportionality on the basis of the documentation referred to in paragraph (62). This documentation has been attached to this document and consists of cash flow-analysis of the project.

78. (62) EEAG: the Member States are, in particular, invited to rely on contemporary, relevant and credible evidence including, for example official board documents, credit committee reports, risk assessments financial reports, internal business plans, expert opinions and other studies related to the investment project under assessment. Documents containing information on demand forecasts, cost forecasts, financial forecasts, documents that are submitted to an investment committee and that elaborate on various investment scenarios, or documents provided to the financial institutions could help to verify the incentive effect. This documentation has been attached to this document

79. The requested state aid for the project of EUR 4 million (NPV is EUR 3,843,478) is 14% of the investment costs and 96.4% of the funding gap. In the PrimA4a case this was 99.3%. The funding gap is EUR 3,987,431

Distortion of Competition and Balancing Test

80. The aid will be granted by a (sub) national authority and thus by the State through State resources within the meaning of the Treaty. It distorts competition by selectively favouring the company OCAP that chooses to invest in the project.

81. The main competitors in the market are suppliers of liquid CO2. Although the shareholder of OCAP CO2 B.V. operates in a competitive market, no other competitors are interested in the realisation of a CO2 grid since the initial investment in a primary pipeline form industry to greenhouses is much too high to provide for reasonable returns on investment. The market for the transport of gaseous CO2 is by definition bound to the location of the pipelines and therefore local by nature. Therefore the effect on trade between member states is limited. Also, considering the structure of the market, the limited availability of transport facilities (pipelines and compression equipment) as well as the substantial investments required for entrance to the market it is not expected that competitors would enter this within the foreseeable future. There are indirect competitors who deliver liquid CO2 by truck. However, costs for liquid CO2 is substantially higher than gaseous CO2 delivered by pipeline. Therefore, without the ability to

use gaseous CO2 form OCAP CO2 BV most greenhouse undertakings will produce their own CO2. Although OCAP CO2 BV operates in a competitive market, there are no competitors active on the market of supplying CO2 using a pipeline in this area.

82. The benefits for the beneficiary of reusing the CO2 over the lifetime of the investments are not such that the extra environmental costs can be recouped even with aid.

83. The benefits for the grower are enhanced crop growth and better quality of crops. Because of this advantage they are willing to pay the CO2 prices resulting from this project.

84. There is no competitive pressure for the growers to maintain a high level of environmental protection. The “carbon footprint” is still no important factor in the market for horticultural products.

85. As far as he Dutch authorities are aware, there are currently no ongoing negotiations at Community level to introduce new or higher mandatory standards.

86. The project face the risk of a slow development of new greenhouses in the areas. Hence, the purchase volume in the first years of operation could be lower than foreseen. This can lead to a lower cash flow.

87. Our assessment of the distortion on competition is that it is limited since the nature of the product market involved and the relative high risks and costs of capital for initial investments. This makes it not attractive for competitors to enter this new market. The aid measure do not affect the market failure in such a way that competition will severely be distorted.

2. CONCLUSION

88. In short, in our opinion the OCAP CO2 BV CO2-project contributes to both the national and European environmental goals, without disproportionally disturbing trade on the internal market.

89. The project will lead to considerable energy savings, while at the same time reducing the emission of CO2 gas into the atmosphere to a great extent. Moreover, it reduces the CO2 emissions that are produced by the production of the renewable fuel bio-ethanol.

90. In the opinion of the Dutch authorities, it can thus be concluded that the aid for the construction by OCAP CO2 BV of infrastructures for the off-take of waste CO2 from a bioethanol plant and delivery of this CO2 to greenhouses for crop growth purposes is to be approved in analogy to the Guidelines on State aid for Environmental protection and Energy (2014-2020).

91. The Dutch authorities therefore kindly request the Commission to find the aid measure to be compatible with the common market pursuant to Article 107(3) (c) of the EC Treaty.

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: FW: NL Notification De Kwakel - adittional question: greenhouses and ETS
Datum: woensdag 7 november 2018 15:43:43
Bijlagen: image002.png

Beste [redacted]
Ter informatie; ik heb bijgaand antwoord met [redacted] opgesteld.
Met vriendelijke groeten,

[redacted]
Subsidia
Postbus 68, 7620 AB BORNE
T 06 [redacted]
[redacted]@subsidia.nl
www.subsidia.nl

Van: [redacted]
Verzonden: woensdag 7 november 2018 15:29
Aan: [redacted] | Subsidia
Onderwerp: FW: NL Notification De Kwakel - adittional question: greenhouses and ETS
Ter info.

Van: [redacted]
Verzonden: woensdag 7 november 2018 15:12
Aan: [redacted]@ec.europa.eu>
CC: [redacted]@minbzk.nl>; [redacted]@minbuza.nl; [redacted]@ec.europa.eu; [redacted]@ec.europa.eu; Stateaidgreffe@ec.europa.eu; [redacted]@ec.europa.eu
Onderwerp: RE: NL Notification De Kwakel - adittional question: greenhouses and ETS
Dear [redacted]
Thank you for your email.
The Dutch authorities can confirm that the conclusions in paras 44 - 45 of decision SA.48816 are also applicable to the De Kwakel file. As a matter of detail, the price bandwidth in the De Kwakel file ranges from EUR [redacted] / ton (for these figures I kindly refer to the previously provided information).
Please do not hesitate to contact me should you have any further queries.
Kind regards,

[redacted]
State Aid Coordination Center for local and Regional Governments
Ministry of the Interior and Kingdom Relations
Turfmarkt 147 | 2511 DP | Den Haag
Postbus 20011 | 2500 EA | Den Haag
t: +31 ([redacted]
e: [redacted]@minbzk.nl
-----Oorspronkelijk bericht-----
Van: [redacted]@ec.europa.eu>
Verzonden: woensdag 7 november 2018 10:49
Aan: [redacted]@minbzk.nl>
CC: [redacted]@minbzk.nl>; [redacted]@minbuza.nl; [redacted]@ec.europa.eu; [redacted]@ec.europa.eu; Stateaidgreffe@ec.europa.eu; [redacted]@ec.europa.eu
Onderwerp: NL Notification De Kwakel - adittional question: greenhouses and ETS
Dear [redacted]
Further to our questions of 24.10 which were answered by your authorities by e-mail of 26.10, I would be very grateful for your clarification on the following issue:
In the Commission decision of 29.11.2017 (case SA.48816 (2017/N)) we read at recitals (44) and (45) the following:
(44) The Dutch authorities explained that, in general, the greenhouses are not subject to the ETS since they do not reach the minimum threshold. If a large greenhouse would be subject to the ETS-system, it would have to pay the price of ETS allowances for each ton of CO2 it emits .

The CO2 production costs however of such a large greenhouse would be on the lower side of the presented bandwidth of EUR [redacted] / ton. Even if the cost of emission allowances would be added, the resulting price bandwidth for such a large greenhouse would be comparable if not lower than the OCAP price (i.e. the lower end of the range of EUR [redacted] / ton).
(45) Therefore, on the basis of the foregoing, the measure cannot be held to give rise to an undue indirect advantage to the CO2 suppliers or to the greenhouses in PrimA4a and it is therefore concluded that these are not beneficiaries of the planned State aid.
However, if I'm not mistaken, I do not find any reference to this information in your submission of 8.10. Also, in your submission at the PN phase (case SA.51336(2018/PN) or further replies provided on 20.7, I was unable to find any information regarding this issue.
Therefore, I would be grateful if you could confirm that a reference/assessment in the same terms is still appropriate in the case at hand.
In view of the above, would be possible to provide confirmation/reply by c.o.b today?
Many thanks beforehand for your collaboration in addressing this request.
Kind regards,
[redacted]
European Commission
Directorate-General for Competition
Unit H 1 – Infrastructure and Regional aid MADO 23/14
1049 Brussels - Belgium
Tel. + [redacted]
E-mail: [redacted]@ec.europa.eu
Disclaimer: The views expressed in this e-mail are personal and may not necessarily reflect those of the European Commission, unless explicitly stated otherwise. This e-mail, and any files transmitted with it, are confidential and intended solely for the use of the individual or entity to whom they are addressed.
-----Original Message-----
From: [redacted]@minbzk.nl]
Sent: Friday, October 26, 2018 5:22 PM
To: [redacted] (COMP)
Cc: [redacted] (COMP); [redacted] (COMP); COMP STATE AID GREFFE; [redacted] (COMP); [redacted]
Subject: FW: NL Notification De Kwakel - few questions for clarification
Dear [redacted]
Please find below the additional clarifications/confirmations as requested by e-mail of Wednesday 24 October.
Kind regards,
[redacted]
Van: [redacted] | Subsidia [redacted]@subsidia.nl>>
Datum: vrijdag 26 okt. 2018 8:45 AM
Aan: [redacted]@minbzk.nl>>
Onderwerp: FW: NL Notification De Kwakel - few questions for clarification
Beste [redacted]
Bijgaand ontvang je de antwoorden op de door de Commissie gestelde vragen inzake de notificatie voor De Kwakel.
Met vriendelijke groet,
[redacted]
[redacted]@subsidia.nl | 06 - [redacted]
Postbus 68 | 7620 AB Borne | www.subsidia.nl>
=====
1. Description of the project (suppliers of CO2):
The OCAP CO2 suppliers currently are Shell and Alco. However, considering all the features of the notified aid, is it appropriate to refer to Alco, in the case at hand, as the main supplier of CO2 (as increased capacity means that it will be able to supply additional CO2 to OCAP)?
Answer: that is correct.
2. Source of funding:
We understand that the aid stems from State resources since it is funded by the Dutch federal budget (point 29, p.7 of the notification). However, at point 7.3.1 of the general form (p. 6) is indicated that the sources of funding are: 'General budget of the State/region/local.
Please confirm/clarify.
Answer : the source of funding is the regional budget of the province Noord-Holland.
3. Counterfactual situation:
At point 60 and 62 (table) of the notification (p.11), your authorities explained that 'the current sales prices for OCAP CO2 BV lie between [redacted] EUR/ton'. However, in the reply to question 12 , p.4 (replies of 20.7.2018, doc. attached), your authorities replied that 'the sales price for OCAP in general lie between [redacted] EUR/ton depending on the purchase volume'.
Please confirm/clarify.
Answer: the correct price range for the current sales prices for OCAP CO2 BV is between [redacted]

[redacted] EUR/ton.
Also, at point 62 (p.11), your authorities explained that for the case at hand, 'the estimated averages sales price is [redacted] EUR/ton to the greenhouse'. However, in the document attached to the notification (OPEX OCAP DE KWAKEL, see attachment) your authorities refer to sales of [redacted] Kton at the price of [redacted] (EUR/ton). In addition, in your reply to question 12, p. 4 (replies of 20.7.2018) you are referring to 'calculations based on average price of EUR [redacted] /ton for the case (...) SA.51336 (i.e. De Kwakel PN phase).
Please confirm/clarify.
Answer: the estimated averages sales price should be [redacted] EUR/ton to the greenhouse. This is the average price on which the business case is built.
4. OPAC operating costs – purchase Alco:
From the document on the operating costs (i.e. OPEX OCAP DE KWAKEL), we understand that the price OCAP pays to Alco for the supply has been contractually determined and is calculated as the arithmetic product of the purchased volume by OCAP (ton/year) and the price (EUR/ton). The planned purchase volume amounts to [redacted] ton/year at a price of EUR [redacted] per ton.
Is this understanding correct?
Answer: this is correct.
However, in your reply to question 10 (also relevant for case SA. 51336 – De Kwakel), see p. 3 (document attached), your authorities explain that 'the contract between Shell and OCAP will be continued. (...) The forecast of the business case is based on the prices that Shell and Alco receive from existing contracts'. In addition, based on recital (41) of the Commission decision on case SA.48816 (2017/N) of 29.11.2017, we understand that the purchase volume of CO2 from Shell by OCAP (ton/year) was at a price of EUR [redacted] per ton.
Please explain and confirm the costs and purchase quantities per annum by OPAC to Alco.
Answer: the question 10 you refer to, applies to the business of OCAP in general. OCAP has two sources who feed in the OCAP-grid (Shell and Alco). The additional supply to the area the Kwakel will be sourced by Alco. Therefore, the operating costs have been based on the price OCAP pays to Alco. This is [redacted] ton/year at a price of EUR [redacted] per ton.
5. OPAC aid application:
Could you please inform on the date for the aid application made by OPAC.
Answer: OCAP has not formally applied yet, but will apply within a couple of weeks. This will be on a date prior to the start of the project.

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: FW: Vragen De Kwakel
Datum: dinsdag 28 mei 2019 13:47:57
Bijlagen: image001.png
image003.png

Met vriendelijke groeten,

[redacted]

Postbus 68, 7620 AB BORNE
T 06 [redacted]
[redacted]@subsidia.nl
www.subsidia.nl

Van: [redacted]@minbzk.nl>
Verzonden: woensdag 21 november 2018 9:00
Aan: [redacted] | Subsidia [redacted]@subsidia.nl>
CC: [redacted]@minbzk.nl>
Onderwerp: RE: Vragen De Kwakel

Goedemorgen [redacted]

Dank voor je antwoorden. Volgens mij zijn deze duidelijk. Ik heb de beantwoording per e-mail doorgezet naar het zaakteam.

Groeten,
[redacted]

Van: [redacted] | Subsidia [redacted]@subsidia.nl>
Verzonden: woensdag 21 november 2018 08:31
Aan: [redacted]@minbzk.nl>
CC: [redacted]@minbzk.nl>
Onderwerp: Vragen De Kwakel

Beste [redacted]

Bijgaand de antwoorden op de vragen inzake De Kwakel:

- **Delimitation between the PrimA4a project** (SA. 48816) **and De Kwakel project** (SA. 52174)

  Could you please confirm that De Kwakel case concerns a different investment project from the PrimA4a project ? Could you please explain what happened with the phase II

of the PrimA4a project (see references at recitals 11 and 12 of the 2017 Commission decision)? Is there any link between such phase II and the new Kwakel case?

Answer: we confirm that De Kwakel is a different investment project form the PrimA4a project. Phase II of the PrimA4a project will be the investment required for supplying CO2 to new to be established greenhouses in PrimA4a. The link between the PrimA4a project and De Kwakel is that De Kwakel will connect to the transport pipeline of the PrimA4a project.

- **Extra CO2 capacity**

  We understand from previous exchanges at the PN phase that CO2 sources are not easy to find. On other hand, your authorities informed that extra CO2 capacity will become available at the Alco source in 2020 (point 16 of your notification). Could you please explain how such CO2 extra capacity is possible (reasons)?

Answer: Alco is increasing its production capacity by debottlenecking their bioethanol plant. Hence more CO2 will come available in the near future. An investment by OCAP in additional CO2-compression will enable the extra off-take of CO2 at Alco.

- **Increased production of CO2**

  Could you please explain whether the aid creates an incentive for an increased production of CO2 from fossil fuel sources? Could you please explain on possible reasons to incentivise production of more CO2 ?

  Could you please clarify whether de Kwakel and PrimA4a greenhouse areas will be supplied with CO2 produced by Meerlanden?

Answer: the aid doesn't incentivise production of CO2 from fossil fuel sources in general (and in this specific case the additional CO2 from Alco is of biomass origin). In fact, OCAP only takes CO2 that is an off-gas or waste stream from industrial processes. This CO2 will never be produced by these industrial plants for the sole purpose of supply to the greenhouses. There is no real business case for the production of CO2 out of fossil fuels for the use in greenhouses. The price of CO2 gas is simply too low and the costs of investments and operation too high to sustain an adequate return on investment. CO2 production for this reason can only be viable if it is a by-product of other processes. The intention of the Dutch authorities is to restrict the emission of CO2 in the atmosphere and they will not in any form subsidize production of CO2 from fossil fuel sources. Also, the production of more CO2 will not be stimulated by the Dutch authorities. The Province of North Holland will not allow the production of CO2 by burning fossil fuels solely for selling it to greenhouses through a distribution system such as OCAP. To prevent the unlikely case that this will happen, there will be a condition stated in the grant for the CO2 projects that OCAP can only source CO2 from sources that produce CO2 as a waste product.

Meerlanden will only supply CO2 to PrimA4a.

Met vriendelijke groeten,

[redacted]

Postbus 68, 7620 AB BORNE
T 06[redacted]
[redacted]@subsidia.nl
www.subsidia.nl

Van: [redacted]
Aan: [redacted]
Cc: [redacted]

Onderwerp: co2 project liquifier
Datum: woensdag 9 januari 2019 11:57:00
Bijlagen: image001.jpg
image004.png

Hi,

Ik heb zojuist overleg gehad met [redacted] en [redacted] over de vragen die Brussel nog gesteld had (in december) over het CO2 liquifier project (bij AEB). Het zijn vooral vragen die gaan over de business case. Dit is het enige project van de vier CO2/glastuinbouw projecten die nog in de prenotificatie fase zit. [redacted]

[redacted] We hebben afgesproken dat [redacted] die tijd daarvoor gaat benutten. Dit betekent dat naar Brussel gecommuniceerd zal worden dat voor de beantwoording van de vragen nog enige tijd (ongeveer drie maanden) nodig is. Dat is voor Brussel geen probleem, want het zit nog in de prenotificatie fase. Dat betekent voor ons dat subsidiëring van het project waarschijnlijk pas op zijn vroegst in of na de zomer zal plaatsvinden.

Vriendelijke groet,

[redacted]

Beleidsadviseur economie
Sector Regionale Economie en Erfgoed
Provincie Noord-Holland

T (023) [redacted]
M 06 [redacted]
Houtplein 33 2012 DE Haarlem
www.noord-holland.nl
[redacted]@noord-holland.nl

cid:image001.jpg@01D3CB4D.944EF840

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: FW: SA. 51335 (2018/PN) - Aid to OCAP - Alton, AgriportA7, Grootslag - Additional questions
Datum: donderdag 13 december 2018 09:04:07
Bijlagen: image002.png
SA.51335-REQ3-Final_20181212.docx

Beste [redacted]
Het heeft een tijdje geduurd, maar de Commissie heeft dan uiteindelijk de vragen gesteld inzake de steun aan OCAP voor de liquefier.
Ik ga het bestuderen en ben benieuwd wat jouw inschatting is.
Met vriendelijke groeten,

[redacted]
Subsidia
Postbus 68, 7620 AB BORNE
T 06 [redacted]
[redacted]@subsidia.nl
www.subsidia.nl

Van: [redacted]
Verzonden: woensdag 12 december 2018 11:25
Aan: [redacted] | Subsidia
CC: [redacted]
Onderwerp: FW: SA. 51335 (2018/PN) - Aid to OCAP - Alton, AgriportA7, Grootslag - Additional questions

Hoi [redacted]
Als een van mijn laatste e-mails bij BZK, stuur ik je hierbij de aangekondigde vragen van DG COMP t.a.v. de Liquefier PN.
Succes met het vervolg!
Groeten,

[redacted]
[redacted]
Coördinatiepunt staatssteun decentrale overheden
Directie Constitutionele Zaken en Wetgeving
Ministerie van Binnenlandse Zaken en Koninkrijksrelaties
Turfmarkt 147 | 2511 DP | Den Haag
Postbus 20011 | 2500 EA | Den Haag
t: +31 [redacted]
e [redacted]@minbzk.nl

SA.51335 (Aid to OCAP – Alton, AgriportA7, Grootslag)
Additional questions

I. Market description and potential impact of the aid on the market

Development of CO2 infrastructure (greenhouses surface)

1. We understand that the existing greenhouses surface and the greenhouses surface under development are the following:

- **Greenport Aalsmeer**:

- De Kwakel: 300 hectares (170 hectares existing and 110 hectares to be built).

- **Greenport Noord-Holland Noord**:

- AgriportA7: 600 hectares (510 hectares existing and 90 hectares to be built);
- Alton: 130 hectares (115 hectares existing and 15 hectares to be built);
- Het Grootslag: 240 hectares existing.

In view of the above, could you please confirm the surface areas listed above and confirm that Het Grootslag area is fully built (if not, please indicate the remaining hectares)?

CO2 supply to greenhouses (mapping)

2. From the information provided, we understand that Greenport Aalsmeer and Greenport Noord-Holland Noord are one of the largest horticultural areas in the Netherlands. In this regard, could you please map these areas by indicating which areas are:

(a) Supplied with gaseous CO2; not supplied with gaseous CO2; and to be supplied in the near future;

(b) Please do the same for the supply of liquid CO2.

OCAP CO2 liquefier capacity

3. Please indicate the expected total (annual and daily) capacity of the OCAP CO2 liquefier that will be built at the AEB incinerator.

4. Please clarify whether:

(a) This capacity can be increased without substantial further investment;

(b) That capacity is fully booked to provide CO2 to AgriportA7, Alton and Het Grootslag (already built area);

(c) There are additional sources of CO2 required to supply the yet to be built hectares with CO2 in the future;

(d) The CO2 supply contract with AgriportA7, Alton and Het Grootslag covers the entire CO2 needs of these greenhouses and if not, how many tons of CO2 would continue to be produced by the greenhouses themselves or be procured as liquid CO2 from other sources.

5. Please also indicate what volumes of CO2 are estimated to be required by new greenhouses if all the remaining hectares would be built.

Product market for liquid CO2

6. Further to your reply of 25.9.2018 (Q4), we would like to better understand whether the production of lower quality liquid CO2 by the projected liquefier by OCAP might be improved to regular 'food grade' and 'technical grade' liquid CO2 to be used in beverages, freezing, water treatment etc. and what type of treatment would be needed to improve quality and at what a) overall costs and b) costs per ton this higher quality could be achieved?

Price for liquid CO2

7. The Dutch authorities consider that operators who delivered liquid CO2 by truck are not direct competitors of OCAP. In addition, the price of liquid CO2 ranges between 70 and 120 EUR/ton. Therefore, this would not be competitive with CO2 alternatives for growers. In this regard,

(a) Please confirm that the average sales price that you indicated at point 66 of the pre-notification still correspond to current market prices?

(b) Please explain why the cost of CO2 is so high compared with the cost of producing CO2 from other sources (i.e. cogen, boiler, OCAP waste CO2) and which elements justify so big difference between the lower and higher end of the price range (70 to 120 EUR/ton)?

Supplies of liquid CO2 to greenhouses (current situation)

8. Please provide us with the list of the 30 biggest Linde customers in the last 5 years in the gaseous CO2 and liquid CO2 markets in the Netherlands and neighbouring countries. Please also explain from which geographical liquid CO2 production facilities they are supplied.

9. We understand from your reply of 25.09.2018 (Q4) that the total volume of CO2 supplied to the greenhouses in the Netherlands (9000 ha) is some 110 kton (2016). The current Linde market share (liquid CO2 to greenhouses) in the Netherlands is of 30% with some 35 kton supplied to greenhouses in 2016. Please indicate to which greenhouse areas these 35 kton are supplied and how the supplies are distributed. Please provide this information in Excel format.

10. Could you please indicate whether liquid CO2 was already supplied to greenhouses located within AgriportA7, Alton and Het Grootslag areas, for which quantities and which company has so far been supplying this liquid CO2? Please indicate where competitors of Linde and OCAP have their closest liquid CO2 supply facilities in the Netherlands, Belgium and Germany.

Impact on future sales of liquid CO2

11. In your reply of 20.7.2018 (Q9) it is said that only a relatively small part (5%-10%) of the total sales volume concerned by the liquefier project will substitute existing liquid CO2 supply and as such can be qualified as competing against liquid CO2.

(a) Please clarify whether those are the 10 000 tons referred in the excel sheet as "back-up sales".

(b) Please explain why it can be confirmed that only 10 000 tons will substitute existing liquid CO2?

(c)Please indicate which company is currently supplying this liquid CO2 and at what price.

(d) Please also indicate what explains that the price of the back-up CO2 was set at 85 EUR/ton.

II. Incentive effect and proportionality of the aid

The business case for OCAP CO2 liquefier

12. In your reply of 20.7.2018, you explained that the nature of the business is that OCAP has to contract multiple clients and has to decide on the investment even when the total demand has not been contracted. Also, we understand that the average contract period with clients for OCAP is limited to 5 years. In this context, please:

(a) Indicate the expected sale price to be charged to potential clients under the above referred contracts (EUR [redacted]/t?) and provide explanations on possible indexation;

(b) Indicate which volume of CO2 could already be secured through contracts and which volume is expected to be covered only in the future.

(c) Provide OCAP's business plan for the liquefier showing the impact of contracted volume on the rate of return in the following scenarios: (i) baseline, (ii) optimistic and (iii) pessimistic.

13. The profitability of the project (absent the aid) in terms of internal rate of return (IRR) is indicated to be [redacted]% (before taxes) over the lifetime by which the investment is fully depreciated (15 years). The Dutch authorities have indicated that the hurdle rate accepted by the parent company is [redacted]%. This rate, however, is the rate that was declared by Linde for the PrimA4A and de Kwakel project only. Please show through internal company documents (predating the aid application) that the hurdle rate is also at [redacted]% for the liquefier and explain why the hurdle rate is set at [redacted]% taking into account the fact that the supply of liquid CO2 is one of the usual activities of OCAP's mother company and given that OCAP now also has quite some experience in the supply of gaseous CO2 to greenhouses?

14. In your reply to Q12 of 20.7.2018, you explain that the growers pay a connection fee to OCAP for their individual supply station and they need to invest in a connecting pipeline and associated valves, process equipment and automation to connect the supply station to their CO2 dosing system. The investments vary from grower to grower and depend largely on the size of the connection.

(a) Could you confirm that all these costs for the growers have been considered in the calculations of the business case (funding gap calculation) and how?

(b) Are they all covered by the reference to "*connection fees*" amounting to EUR [redacted] in the State aid calculation for OCAP-AEB (Excel sheet of 25.5.2018)?

15. Please indicate why in your reply of 25.09.2018 you refer to a transport cost of [redacted] EUR/ton while in the excel sheet a transport cost of [redacted] €/ton is indicated. Please also indicate whether the difference in transportation costs between the liquefier and AgriportA7, Alton and Het Grootslag respectively will be reflected in the CO2 price to AgriportA7, Alton and Het Grootslag.

16. Please indicate to what the production costs "intake Alco & Shell" in the excel sheet "Opex OCAP AEB" (15.8.2018) refer to.

III. Absence of aid to Shell and Alco

17. Please explain why the purchase price from Shell and Alco has increased from [redacted]/ton and [redacted]/ton in previous cases to [redacted] €/ton. Please also explain which elements guarantee the absence of (indirect aid) at the level of Alco and Shell.

IV. Miscellaneous

Granting authority

18. In point 33 of the pre-notification, the Dutch authorities indicate that the *'aid stems from State resources since it is funded by the Dutch federal budget*'. Does it mean that the measure is not funded by the regional budget of the province Noord-Holland?

Distances

19. What is the distance between the liquefier and AgriportA7, Alton and Het Grootslag respectively?

Origin of CO2 and absence of artificial incentives for Alco and Shell to increase CO2 emissions.

20. Can you confirm that the CO2 to be supplied via OCAP CO2 liquefier to AgriportA7, Alton and Het Grootslag comes from additional CO2 at Shell and Alco? Please indicate how Shell and Alco can produce this extra capacity.

Van: [redacted]
Aan: [redacted]
Cc: Bond, dhr. J.H.M. (Jaap); [redacted]
Onderwerp: tijdelijke terugtrekking project CO2 vervloeier OCAP
Datum: donderdag 28 maart 2019 11:20:00
Bijlagen: bre-bzk 19-005.pdf
ATT00001.htm

Beste mensen,
Ter informatie de laatste stand van zaken projecten CO2/glastuinbouw.
Bijgaand de brief van biza waarin het project van OCAP om een vervloeier te bouwen bij AEB in de Amsterdamse Haven, uit de prenotificatiefase is teruggetrokken. In principe is dit een tijdelijke maar ook noodzakelijke actie. In overleg met OCAP, Biza en Brussel hebben we hiertoe besloten.
In december had de EU een reeks vragen gesteld over dit project, met name over de business case en de uitgangspunten daarvan. OCAP had de beantwoording steeds uitgesteld omdat er een onzekerheid over de levering van CO2 [redacted] was opgetreden, als gevolg van het Klimaatakkoord, het coalitieakkoord en het Europese ETS emissiehandelsysteem. [redacted] Dus daarom kunnen de vragen van de EU nog niet beantwoord worden. Brussel was eerder op de hoogte gesteld dat dit speelt.
De EU kan de prenotificatiefase niet eindeloos laten duren. Brussel had een deadline voor beantwoording gesteld van eind maart. Als we het niet terugtrekken, zijn ze verplicht om een onderzoek te doen, wat lang kan duren, extra vragen kan opwerpen en dus onwenselijk is. Beter is om de prenotificatie stop te zetten, en weer op te starten als er voor OCAP meer zekerheid is over levering van CO2. Die zekerheid kan worden geleverd als er op rijksniveau afspraken worden gemaakt dat de CO2 die de industrie levert aan de glastuinbouw, voor de industrie geldt als reductie en voor de glastuinbouw als uitstoot. De glastuinbouw kan alleen zijn reductiedoelstellingen halen als er externe CO2 wordt aangeleverd, dus de sector staat open voor afspraken hierover. [redacted] Daarna kan het project weer worden ingediend bij de EU. We moeten echter ook rekening houden met een scenario dat dit nog veel langer gaat duren en over het jaar wordt getild.
Dit is dus nu het overzicht:

1. Project CO2/ De Kwakel (€ 4 mln subsidie) is goedgekeurd door Brussel en subsidie is verstrekt. Voorbereidende werkzaamheden zijn gestart.
2. Project CO2/HVC Middenmeer (€ 0,7 mln subsidie): project is uit de notificatiefase teruggetrokken omdat HVC nog wil sleutelen aan de business case en er onzekerheid is over de bereidheid van de directie om te investeren in het project. Doel is om voor het zomerreces het aangepaste project weer te laten prenotificeren in Brussel, anders wellicht definitief intrekken.
3. Project CO2 vervloeier van OCAP bij AEB (€ 3 mln subsidie). Zie hierboven. Doel is om zodra er meer zekerheid is over CO2 levering, het project opnieuw te prenotificeren.
4. Project CO2/ Meerlanden (0,8 mln subsidie): dit project zit nog in de notificatiefase. Er waren nog wat extra vragen uit Brussel gesteld en die zijn beantwoord. Zeer binnenkort verwachten we de uitslag. We verwachten dat dit positief is.

Tot zover.

Groet,
[redacted]

Van: [redacted] | Subsidia
Verzonden: woensdag 27 maart 2019 18:27
Aan: [redacted]
Onderwerp: Fwd: Withdrawal PN SA.51335 - Aid to OCAP - CO2 pipeline-liquifier

Beste [redacted] het heeft even geduurd, maar dan toch.

Met vriendelijke groet,
[redacted]
Postbus 68, 7620 AB BORNE
T 06 [redacted]
[redacted]@subsidia.nl

Begin doorgestuurd bericht:

> **Van:** "[redacted]@minbzk.nl>
> **Datum:** 27 maart 2019 om 18:07:19 CET
> **Aan:** "[redacted] | Subsidia' [redacted]@subsidia.nl>
> **Onderwerp: FW: Withdrawal PN SA.51335 - Aid to OCAP - CO2 pipeline-liquifier**
>
> Hoi [redacted]
>
> Bijgevoegd de intrekkingsbrief zoals die naar de Commissie is verzonden.
>
> Groet,
> [redacted]
>
> Verzonden met BlackBerry Work
> (www.blackberry.com)
>
>

Kingdom of the Netherlands

European Commission
Directorate General Competition
State-aid Greffe

Permanent Representation of the Kingdom of The Netherlands to the European Union
Home Affairs

Kortenberglaan 4-10
1040 Brussel
Belgium
www.minbuza.nl

Contact
[redacted]

T 02 - [redacted]
bre-bzk @minbuza.nl

Date March 26, 2019
Re Withdrawal PN SA.51335 - Aid to OCAP - CO2 pipeline-liquifier.

Our reference
bre-bzk 19-005

Cc

Encl.

The Dutch authorities would like to withdraw the pre-notified aid measure to OCAP - CO2 pipeline-liquifier, SA.51335. Some of the aspects of the pre-notified measure depend on the outcome of the negotiations in the context of the Dutch Climate Deal and the decisions which have to be made by the Dutch government. This process affects the extension of the contract between [redacted] and OCAP for the supply of CO2. Given the fact that the final conclusion of the Climate Deal might take a while the Dutch authorities prefer to withdraw the abovementioned aid measure.

Please accept our apologies for any inconvenience.

The Permanent Representative
On his behalf

[redacted]

Counsellor

Van: [redacted] | Subsidia
Aan: [redacted]
Onderwerp: FW: Vraag EC mbt SA. 51335 CO2 Liquefier
Datum: maandag 18 maart 2019 09:54:52

Met vriendelijke groeten,

[redacted]

Postbus 68, 7620 AB BORNE
T [redacted]
[redacted]@subsidia nl
www.subsidia nl

-----Oorspronkelijk bericht-----
Van: [redacted]@minbzk.nl>
Verzonden: vrijdag 15 maart 2019 10:47
Aan: [redacted] | Subsidia [redacted]@subsidia nl>
CC: [redacted]@minbzk nl>
Onderwerp: Vraag EC mbt SA. 51335 CO2 Liquefier

Beste [redacted]

De Commissie heeft naar de stavaza in Liquefier gevraagd. Zie hieronder de tekst uit de mail van Joao.

On 31.1.2019 we had a conference call with you and the NL authorities on the withdrawn HVC case and on the still pending case SA. 51335 (Co2 liquefier).
As you may remember, in the light of the political and technical negotiation ongoing at that time on a Dutch Climate Deal, your authorities committed to provide updated info in one month or, if no further developments on said Climate Deal by beginning of March, to withdraw the PN .

In view of the above, and considering the longer length of the pre-notifications contacts on the case, I would be grateful if you could update us on the file and to let us know if, and by when, do you plan to reply to our request for information dated back to December 2018, or alternatively, as discussed to withdraw the pre-notification as discussed. In the latter case, your authorities are not obviously prevent to pre-notify a similar measure again to the Commission, whenever you find it appropriate, as set out in point 17 of the Code of Best Practices (2018/C 253/05).

Graag hoor ik van je wat de provincie met de PN wil doen. Als hij open moet blijven, moeten we ook aangeven wanneer de antwoorden op de vragen uit december 2018 naar de Commissie worden gezonden.

Groet,
[redacted]