28 February 2023

Positive preliminary assessment of the satisfactory fulfilment of milestones and targets related to the first payment request submitted by Denmark on 16 December 2022, transmitted to the Economic and Financial Committee by the European Commission

Executive summary

In accordance with Article 24(2) of Regulation (EU) 2021/241, on 16 December 2022, Denmark submitted a request for payment for the first instalment of the non-repayable support. The payment request was accompanied by the required management declaration and summary of audits.

To support its payment request, Denmark provided due justification of the satisfactory fulfilment of the 25 milestones and targets of the first instalment of the non-repayable support, as set out in Section 2.3(3.1) of the Council Implementing Decision of 13 July 2021 on the approval of the assessment of the recovery and resilience plan for Denmark¹.

Upon receipt of the payment request, the Commission has assessed on a preliminary basis the satisfactory fulfilment of the relevant milestones and targets. Based on the information provided by Denmark, the Commission has made a positive preliminary assessment of the satisfactory fulfilment of all 25 milestones and targets.

The milestones and targets positively assessed as part of this payment request demonstrate significant steps in the implementation of Denmark's Recovery and Resilience Plan. This includes, among others, removing carbon rich soils from production for a more decarbonised agriculture, the adoption of a political agreement increasing emission taxes on industry, as well as a legal act incentivising consumers to choose zero and low-emission cars by decreasing the registration tax for this type of vehicles. The milestones and targets also confirm progress towards the completion of investment projects related to, among others, improving the healthcare system through new digital solutions, the approval of the legal framework for the transition towards energy efficiency in buildings, the adoption of the law on the green tax reform to lower greenhouse gas emissions, the approval of several political agreements on sustainable mobility, and in the field of research for green solutions, the selection of four mission research and development and innovation roadmaps and the approval of a bill to incentivise research and development investments in companies.

By the transmission of this positive preliminary assessment and in accordance with Article 24(4) of Regulation (EU) 2021/241, the Commission asks for the opinion of the Economic and Financial Committee on the satisfactory fulfilment of the relevant milestones and targets.

¹ 10154/21, 10154/21 ADD 1.

Non-repayable support
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Related Measure: C7.I5: Incentives to boost R&D in companies

Non-repayable support

Number: 1 Related Measure: C1.I2. Measures to en	sure stocks of critical drugs
Name of the Milestone: Report of the assessment of stock Agency to be made available aiming to avoid situations wit Denmark	
Qualitative Indicator: Report on the assessment of the sto medicines and follow-up by the Danish Medicines Agency a	lime: ()4 2021
Context: The measure aims to maintain and ensure the stock of criti Denmark. The goal is to avoid critical situations with shorta Milestone 1 concerns the submission of a report of the as Danish Medicines Agency. Milestone 1 is the only milestone of this investment. How Plan foresees other measures to strengthen the resilient improve digital solutions and to study and report on c milestones/targets 2 to 6 under the same component.	ages of important drugs. ssessment of stocks of critical drugs by the vever, the Danish Recovery and Resilien ce of the health care system, namely,
 Evidence provided: In line with the verification mechanism set out in the evidence was provided: i. Summary document duly justifying how the milestor was satisfactorily fulfilled. ii. The contract signed between the Danish Medicin 2020 and respective annexes. iii. The Q4 2021 quarterly report of the Danish Medicin medicines on 15 December 2021. The authorities also provided: i. Report of 28 April 2022 on the stocks of critical manual Agency and sent to the Ministry of Health. 	one (including all the constitutive element nes Agency and Amgros on 22 Decemb cines Agency regarding the stocks of critic
Analysis: The justification and substantiating evidence provided by th elements of the milestone. The Danish Medicines Agency has assessed and reported	
stocks of critical medicines. In line with the Council Implementing Decision requireme the Danish Ministry of Health by the Danish Medicines Age is based on a quarterly report of Q4 2021, which was asses	nts, an assessment has been passed on ncy in a report of 28 April 2022. This repo

In line with the Council implementing Decision requirements, an assessment has been passed on to the Danish Ministry of Health by the Danish Medicines Agency in a report of 28 April 2022. This report is based on a quarterly report of Q4 2021, which was assessed on 15 December 2021 and reported to the Danish Medicines Agency on 16 December 2021 by Amgros. Amgros is a public-sector entity whose main area of activity is to secure the right medicines for patients at public hospitals by organising and conducting tendering procedures and procurement for the Danish regions, as per their website: <u>https://amgros.dk/en/about-amgros/</u>. As stated in the summary document, the stocks of critical drugs are being assessed on a quarterly basis by Amgros and reported to the Danish Medicines Agency. The data provided in the quarterly report of Q4 2021 shows the stock levels of regular medicines considered critical and of medicines for treating COVID-19 patients.

The assessment shall be of high importance in forecasting and ensuring the right level of storage capacity for critical drugs.

To maintain and ensure strategic stocks of critical drugs in the secondary health sector, the Danish Medicines Agency signed a contract with Amgros. Sections 3 and 4 of the contract state that the role of Amgros is to procure and maintain, as far as possible, a security stockpile of selected medicines to safeguard against shortages and to purchase COVID-19 treatment drugs.

Furthermore, in line with the description of the measure, to avoid critical situations with shortages of important drugs, the Danish authorities have established and will now extend infrastructure and logistics support to maintain and ensure strategic stocks of critical drugs in the secondary health sector. This follows from section 2.1 of the contract stating that its purpose is to increase and maintain a security stock of relevant medicines so that possible backorders and supply issues do not result in serious shortages.

Furthermore, in line with the description of the measure, the list of critical medicines has been prepared on the basis of input from the clinical pharmacologists in the regions. Annex 2 to the contract provides this list. As stated above, Amgros produces quarterly reports to the Danish Medicines Agency on the stock of critical drugs. The Danish Medicines Agency has subsequently reported the assessment to the Danish Ministry of Health. The specific medical products and their storage levels have been continuously adjusted in mutual agreement between the Danish Medicines Agency and Amgros as stated in the summary document. This shows that the assessment has been of high importance in forecasting and ensuring the right level of storage capacity for critical drugs.

An assessment of infection pressure and number of patients hospitalized with COVID-19 as well as the general development in the pharmaceutical markets shall be included in the assessment.

As stated in the report of 28 April 2022 issued by the Danish Medicines Agency and sent to the Ministry of Health, the conclusions were based on an assessment made by clinical pharmacists in intensive care units in the Capital Region of Denmark in December 2021 and provided by Amgros. As stated in the summary document, the assessment took into account the infection pressure and number of patients hospitalized with COVID-19 and whether the medicines held in stock corresponded to pandemic developments and other healthcare needs. This derives from sheet *'purchasing and stock'* ('Indkøb og *lager*') of the Q4 2021 quarterly report of the Danish Medicines Agency, reflecting Amgros' data on the stock and procurement of medicines, including for the treatment of COVID-19. For each COVID-19 medicine listed, this sheet shows the stock of packages per treatments available; in other words, it showcases how many treatments are possible to provide with the packages on stock. It further details the stock of medicines that were 'on order', their expected arrival date, and the number of packages that will be available for treatments, reflecting general developments in pharmaceutical markets. The assessment of the need for medicines is a function of the epidemiological situation including the infection pressure and the number of hospitalised patients in need of treatment, as stated in the summary document, and the stocks of medicines is being adjusted on a need basis. Based on it, the Danish Medicines Agency determined and stated in the report of 28 April 2022 that "the qualification of the COVID-19 critical medicines concludes that Denmark is well covered with relevant medicines so that the stockpile helps avoid supply difficulties for critical medicines". The report further concludes that the establishment of stocks helped avoid supply difficulties for critical medicines, affecting fewer patient treatments, and that the stock overall contributed to ensuring an adequate supply of critical medicines in the secondary sector.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 2

Related Measure: C1.I3. Digital solutions in the healthcare sector

Name of the Milestone: Evaluation of patient involvement and widespread use of telemedicine to be made available by the Danish Ministry of Health in close collaboration with Danish Regions

Qualitative Indicator: An evaluation about telemedicine solutions of health	Time: Q4 2021
anxiety	11me: Q4 2021

Context:

The objective of the measure is that the Ministry of Health develops new digital solutions to make the healthcare system more connected following the COVID-19 pandemic. The solutions related to this investment shall help foster the widespread use of digital technologies, patient involvement and the widespread use of telemedicine.

Milestone 2 concerns an evaluation report written by the Central Region, in close collaboration with the Danish Regions, and shared with the Danish Ministry of Health, on telemedicine solutions of health anxiety related to the COVID-19 pandemic to further develop and increase the use of telemedicine and patient involvement.

Milestone 2 is the first step of the implementation of the investment, and it will be followed by target 3 related to the development of the telemedicine consultation application ContactDoctor (*KontaktLæge*), which is also part of the first payment request, and by milestone 4 related to the implementation of a digital questionnaire in the application MyDoctor (*MinLæge*). The investment has a final expected date for implementation in Q3 2023.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. **Final evaluation report** of 31 March 2022 **about telemedicine solutions of health anxiety**, issued by the Central Region.

The authorities also provided:

i. Email, of 31 March 2022, sent by the Centre for Telemedicine and Tele healthcare of the Central Region to the Danish Ministry of Health.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

In close collaboration with Danish Regions, the Central Region shall report an evaluation to the Danish Ministry of Health on telemedicine solutions of health anxiety.

In line with the Council Implementing Decision requirements, the Danish Regions collaborated for producing an evaluation report following a project on telemedicine solutions for COVID-19-triggered health anxiety (see final evaluation report of 31 March 2022 about telemedicine solutions of health anxiety, issued by the Central Region). The allocation of funds for the project was given on the basis of a dialogue between the Ministry of Health and the Danish Regions (see page 6 of the final evaluation report, section "grant of the project"), and the final evaluation report was prepared and sent by the Central Region to the Danish Ministry of Health as proven in the email of 31 March 2022, sent by the Centre for Telemedicine and Tele healthcare of the Central Region to the Danish Ministry of Health. The evaluation report provided by the authorities details the results of the project, whose aim is to increase accessibility for internet-based treatment (video consultations) for patients with COVID-19-triggered health anxiety. Page 6 of the final evaluation report, section "project purpose", refers to the

three goals of the project: i) to adapt the existing internet-based treatment programme to include health anxiety triggered by COVID-19; ii) to scale-up the existing treatment offer for COVID-19 pandemic health anxiety regionally and nationally; iii) to evaluate and provide quality assurance of the new telemedicine treatment offer for COVID-19-triggered health anxiety.

To further develop and increase the use of telemedicine.

The further development and increased use of telemedicine is justified by the scaling potential of the project. Page 4 of the final evaluation report, section "Existing treatment services for patients with health distress", explains that the existing offer of care for health anxiety is scarce and often characterised by long waiting times. Section "Scaling potential", page 18, of the final evaluation report refers that the scaling potential of this project is significant as the offer provided is extendable to all health anxiety diseases and not only to COVID-19 related health anxiety. It concludes that the treatment should be extendable to everyone with health-anxiety and not exclusively to COVID-19-triggered health anxiety.

Furthermore, in line with the description of the measure, the Ministry of Health is required to develop and increase the use of these new digital solutions such as widespread use of digital solutions and video consultations. The project was developed to increase the digital solutions in the healthcare sector. This is shown by the purpose of the project, its digital nature and scaling potential. The fact that patients have access to an online treatment for COVID-19-triggered health anxiety which is adapted to each patient and that patients can self-enrol in the treatment without medical referral proves that this solution contributes to a more digitalised healthcare sector. The use of video consultations is used in the implementation of the project, where patients receive treatment in the form of video consultations (page 5 of final evaluation report of 31 March 2022), which shows that the project promotes the increased use of video consultations and telemedicine.

To further develop and increase the use of patient involvement.

The project aims at increasing patient involvement in the healthcare sector. Patients participating in the project did not need a referral from the doctor to participate in the project. As stated on page 15 of the final evaluation report of 31 March 2022, section "Self-reference requires adjusted visa procedure", patients could answer an online questionnaire on a webpage designed for the programme about their level of health anxiety before they received the treatment. Based on the answers, the treatment was specifically designed for each patient individually. Page 5 of the final evaluation report of 31 March 2022 states that patients received the treatment through video consultations and interactive exercises on the webpage designed for the programme. The associated health professional communicated with the patient in the embedded message module and the health professional gave the patient access to new modules along with the patient's progress on the website designed for the programme. The treatment was therefore tailored to the individual patient, and these procedures were designed to increase patient empowerment and involvement. The nature and the goals of the project prove its alignment with the goals of developing and increasing the use of new digital solutions and patient involvement, as well as the widespread use of telemedicine and digital solutions in the healthcare sector.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 3	Related Measure:	C1.I3. Digital solut	ions in the hea	althcare sector
Name of the Target: Develop and make available facilities for telemedicine consultation (<i>KontaktLæge</i>) for multiple platforms				
Quantitative Inc	Quantitative Indicator: Number Baseline: 1 Target: 2 Time: Q4 2021			
Context:				

The objective of the measure is that the Ministry of Health develops and promotes new digital solutions to make the healthcare system more connected following the COVID-19 pandemic. The solutions shall include the use of digital technologies and video consultations.

Target 3 concerns the development and operationalisation of the software application ContactDoctor (*KontaktLæge*) on a second mobile device platform. The goal is to increase the use of video telemedicine consultations to other mobile device platforms and to make the application available for iOS and Android devices.

This target is first step of the implementation of the investment, and it will be followed by milestone 2 related to an evaluation of patient involvement and widespread use of telemedicine, which is also part of the first payment request, and by milestone 4 related to the implementation of a digital questionnaire in the application MyDoctor (*MinLæge*). The investment has a final expected date for implementation in Q3 2023.

Evidence Provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the target (including all the constitutive elements) was satisfactorily fulfilled.
- ii. **Certificate of works completion** of 3 November 2022, signed by the Ministry of Health and MedCom.
- iii. Link to both platforms where the app is now available:
 - a. Android:

https://play.google.com/store/apps/details?id=com.trifork.kontaktlaege&hl=da&gl=US b. iOS: https://apps.apple.com/dk/app/kontakt-l%C3%A6ge/id1512135032?l=da

The authorities also provided:

- i. **Letter of Commitment** signed by MedCom on 21 December 2020 showing the agreement between MedCom and the Danish Ministry of Health for the development of the application.
- ii. Work Order Agreement signed between MedCom and Trifork Public A/S on 21 January 2021. Trifork Public A/S was commissioned by MedCom to develop the application.
- iii. **Mid-term evaluation report** of the ContactDoctor (*KontaktLæge*) application issued by MedCom in November 2021.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the target.

Increase the use of video telemedicine consultations ContactDoctor (*KontaktLæge*) to other mobile device platforms.

The authorities provided the mid-term evaluation report of November 2021 of the project for the development of the application ContactDoctor (*KontaktLæge*). In section 1 "Introduction", it is stated that the ContactDoctor (*KontaktLæge*) app was created to allow citizens at particular risk of COVID-19 infection or citizens who do not or cannot use NemID (a common log-in solution in Denmark that citizens may use for video consultations) and are connected to the municipality, to have video consultations with the help of the social and health professionals in the municipality.

To increase the use of video telemedicine consultations, the Danish Ministry of Health, in collaboration with MedCom, contracted the further development of the application ContactDoctor (*KontaktLæge*) on iOS, which is the second mobile device platform where the application is available, as it was previously available on Android devices only. The certificate of works completion of 3 November 2022, signed by the Ministry of Health and MedCom, the contractor who developed the application, confirms

that the app is available and operational on both platforms. Therefore, the target of having the application available on two mobile platforms was achieved.

Furthermore, in line with the description of the measure, the Ministry of Health is required to develop and increase the use of these new digital solutions such as widespread use of digital solutions and video consultations. As per section 1 "Introduction" of the mid-term evaluation report, the application ContactDoctor (*KontaktLæge*) was firstly developed as a digital solution for the Danish healthcare system given that it provides the means for access to video consultations for citizens through the help of municipalities. As per the Work Order, section "description of the service", the expansion of the application to a new platform was performed so that the application can also be accessed by municipalities via iPhone/iOS. The expansion of the application to a new platform improves this digital solution by making it available to more users, therefore increasing the access to new digital solutions and video consultations.

The Danish Ministry of Health in collaboration with MedCom shall develop and make available the application ContactDoctor (*KontaktLæge*) on a second mobile device platform.

Page 1 of the Letter of Commitment of 21 December 2020 proves that the allocation of funds designated to the further development of the app ContactDoctor (*KontaktLæge*) were agreed between MedCom and the Danish Ministry of Health. MedCom is a non-profit organisation financed and owned by the Ministry of Health, Danish Regions and Local Government Denmark to facilitate cooperation between authorities, organisations and private firms linked to the Danish healthcare sector, as stated in the Council Implementing Decision and on the website of MedCom: https://www.medcom.dk/medcom-in-english/about-medcom

The Work Order agreement between MedCom and Trifork Public A/S shows that MedCom contracted Trifork Public A/S for the development of the application. In the section "description of the service", it is stated that the Work Order Agreement of 21 January 2021 was signed to further develop ContactDoctor (*KontaktLæge*) so that the solution can also be accessed by municipalities via iPhone. Page 5, section "Background" of the mid-term evaluation report refers that the application ContactDoctor (*KontaktLæge*) was released for use by all municipalities in May 2020 and can be used on tablets/iPads and mobile phones that are Android and iOS controlled. Page 17 of the mid-term evaluation report from MedCom, further references in section "*Kontakt Læge* app" that the application is available for both Android and iOS devices.

Furthermore, the authorities have also provided the links to the application on both platforms. Both links remain active, as verified by Commission staff on 11 January 2023.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 6	Related Measure: C1.I4. En medical products	mergency management & mor	nitoring of critical	
Name of the Target:	Implement an optional IT-s	ystem to report on the side ef	fects of the COVID-	
19 vaccines into 1250 general practitioners' local digital platforms.				
Quantitative Indicator: Number	Baseline: 1 000	Target: 2 250	Time: Q3 2021	
Context: The objective of this measure is to improve the infrastructure for monitoring and acting upon potential side effects of the COVID-19 vaccines. Target 6 concerns the implementation of an IT-system to report side effects of the COVID-19 vaccines into 1 250 additional general practitioner's (hereinafter referred to as "GPs") digital platforms. Target 6 is the only target in this investment.				

In line with the description of the measure in the Council Implementing Decision, Denmark has taken steps to improve the infrastructure for monitoring shortages and supply problems, which is assessed in milestone 1 of this payment request.

Evidence Provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the target (including all the constitutive elements) was satisfactorily fulfilled.
- ii. Letter from the Danish Medicines Agency, dated 4 November 2022, confirming that the IT system (webservice) to report on the side effects of the COVID-19 vaccines has been implemented in all medical practice systems for general practitioners in DK, and that it can be used by all general practitioners (Annex A).
- iii. The **list of all general practice clinics with access to the IT system** to report on the side effects of the COVID-19 vaccines after the implementation of the IT system in the additional practitioner's digital platforms, containing 1680 general practice clinics in total (Annex B).

The authorities also provided:

- i. List of general practice clinics which gained access to the IT system for reporting side effects as a result of implementation of the measure, representing 956 general practice clinics. The list also includes the associated general practitioner medical management system and the number of GP capacities in each general practice clinic (Annex C).
- ii. Documentation from the Danish Medicine's Agency dated 5 December 2022 showing the date of receipt of the first reports of side effects to COVID-19 vaccines via the IT system (webservice) for clinics not in the baseline (Annex D).
- iii. Notice by the Danish Medicines Agency in the October 2020 edition of the magazine Monthly Journal of Rational Pharmacotherapy (*Månedsbladet for Rationel Farmakoterapi*), advertising the IT-system for reporting side effects to clinics which already had access at the baseline (Annex E).
- iv. Documentation from the Danish Health Data Authority defining the 'GP capacities', a measure used to report number of GPs per clinic in Annex C, and the data sources used to produce Annex C (Annex F).
- v. **First report of suspected side effect of the COVID-19 vaccine, sent on 18 January 2021 to the Danish Medicines Agency using the IT-system** (DKMA webservice) provided by the general practitioner medical management system **XMO** (Annex G).
- vi. **First report of suspected side effect of the COVID-19 vaccine, sent on 9 February 2021 to the Danish Medicines Agency using the IT-system** (DKMA webservice) provided by the general practitioner medical management system **Multimed** (Annex H).
- vii. **First report of suspected side effect of the COVID-19 vaccine, sent on 11 January 2021 to the Danish Medicines Agency using the IT-system** (DKMA webservice) provided by the general practitioner medical management system **NOVAX** (Annex I).
- viii. **First report of suspected side effect of the COVID-19 vaccine**, **sent on 29 January 2021 to the Danish Medicines Agency using the IT-system** (DKMA webservice) provided by the general practitioner medical management system **MyClinic** (Annex J).

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the target.

Implementation of an IT-system concerning reporting of side effects of the COVID-19 vaccines.

As stated in the letter from the Danish Medicines Agency (Annex A), the optional IT-system for reporting side effects of COVID-19 vaccines and other medicines has been implemented in all medical practice systems in general practice clinics in Denmark and is accessible to all doctors associated with a general practice clinic. The IT-system was deployed by all seven IT-providers of medical management systems. In the documentation from the Danish Medicine's Agency dated 5 December 2022 (Annex D), the Danish Medicines Agency documents the first reports of side-effects of COVID-19 vaccines received through the IT-services of each of the four medical management providers which additionally implemented the IT-service as part of the implementation of the target. This shows that the system is operational and is accessible to be used by all general practitioners. Furthermore, it is reported in the summary document that over 10 000 reports of side-effects were received by the Danish Medicines Agency through the IT-system between February and August 2021.

Furthermore, in line with the description of the measure, the Danish authorities are required to improve the infrastructure for monitoring and acting upon potential side effects of the COVID-19 vaccines. As described on page 3 of the Notice by the Danish Medicines Agency (Annex E), compared to the previous e-form system, the new IT-system for reporting side-effects of COVID-19 vaccines and other medicines automatically prefills information that is available in the GP's local digital platforms. This makes reporting of side-effects both quicker and easier, while reducing the need for manual follow-up of errors by the Danish Medicines Agency. This improves the infrastructure for monitoring and acting upon potential side effects of the COVID-19 vaccines. The measure description also presents another objective that is not directly reflected in the milestones and targets in the Council Implementing Decision, namely to strengthen the overall emergency planning. However, monitoring side effects of the COVID-19 vaccines in the context of a pandemic health emergency should also be regarded as a means to strengthen overall emergency planning by allowing to detect treatment problems early on and adapt the emergency response accordingly.

Coverage of 1 250 additional general practitioners' local digital platform.

As there is no central registry of the individual doctors associated with each general practice clinic, the Danish Medicines Agency provided in Annex A an estimate of the number of general practitioners which gained access to the system with the implementation of the measure, as well as an estimate of the number of GPs which already had access in the baseline. The baseline estimate is detailed below in the section "Baseline of 1 000 GPs in 2021". This estimate is based on the total number of GPs working across all general practice clinics in Denmark so as to produce an estimate of the average number of GPs working in each general practice clinic. A census of the number of GPs in general practice clinics is done every year on 1 January. On 1 January 2021 there were 3 543 GPs affiliated to the 1 680 clinics, as listed in Annex B. This corresponds to an average number of 2.11 GPs per clinic The letter from the Danish Medicines Agency (Annex A) states that approximately 60% of general practice clinics received access to the IT-system as a result of the implementation. The basis for this 60% estimate is explained below in the "Baseline of 1000 GPs in 2021" section. The Danish Medicines Agency therefore estimates that the approximately 60% of clinics which received access after the baseline correspond to 2 126 GPs (i.e.: 60% of 3 543 GPs), which far exceeds the target of 1 250 additional GPs with access required by the Council Implementing Decision. These approximately 60% of clinics are listed in Annex C, which shows the 956 clinics that gained access to the IT-system after the implementation of the measure, associated with the four medical management IT-systems providers which implemented the IT-system after the baseline cut-off (XMO, Novax, Multimed, MyClinic). Annex C also provides further evidence of the number of GPs associated with each GP clinic to supplement the estimates from Annex A, based on data from MedCom (a non-profit organisation financed and owned by the Ministry of Health, Danish regions and Local Government Denmark, to facilitate cooperation between stakeholders in the Danish healthcare sector), the Registry of Health Care Providers and the Danish Health Data Authority. Annex C shows the number of GP capacities associated with each of the clinics in the post-baseline group of clinics. In 2022, at the time of data collection, there were 2036 GP capacities in the 956 clinics listed in Annex C. The methodological note from the Danish Health Data Authority (Annex F) explains that a GP capacity is an administrative measure which can be interpreted as a full-time general practitioner. The number of GPs working in general practice clinics is expected to be higher than the capacity measure; there can be several doctors covering one GP capacity, for example if they work part-time. The capacity measure also does not include substitute doctors and GPs in training. The number of GP capacities associated to clinics in Annex C can therefore be safely seen as a 'lower bound' estimate of the number of physical persons working as GPs in the clinics. In order to ascertain the plausibility of the capacity-based estimates provided by the authorities, Commission staff undertook a spot-check of the GP figures listed in Annex C by consulting the websites of 60 corresponding general practice clinics on 3 February 2023. For this, every tenth clinic on the list was picked from the list (entries 1, 11, 21 etc. until entry 591). Out of the 60 clinics sampled, two had closed since the collection of the data in August 2022. From the 58 open clinics, the total number of GPs suggested from the websites of the general practice clinics was 141, compared to an estimated 127 GP capacities in Annex C. The average number of GPs per clinic in the sample was 2.43, which is higher than the average 2.19 suggested by the GP capacities estimate and also higher than the overall average 2.11 used for estimation in Annex A. On this basis, the Commission considers that the evidence provided by Denmark of the GP capacities can reliably be used as a 'lower bound' measure of the number of GPs in the clinics listed in Annex C, and that the number of GPs connected as a result of implementation of the measure is at least 2036, which exceeds the target of 1250 additional GPs with access.

Baseline of 1 000 GPs in 2021.

Using the estimation method described above, the Danish Medicines Agency estimated the number of GPs who had access at the time of measurement of the baseline (Annex A). The assumption made to calculate both the baseline and post-baseline figures in Annex A is of an average 2.11 GPs per clinic. In Annex C, we find that the average number of GP capacities per clinic is 2.13, which is in line with the assumption. The Danish Medicines Agency and the Ministry of Health argue that there is no theoretical or empirical evidence of systematic differences in the average number of GPs in clinics between those clinics that received access before the baseline cut-off date and those after (Annex A). According to the Danish Medicines Agency, approximately 40% of clinics had access to the IT-system in the baseline (Annex A). On this basis, the Danish Medicines Agency estimates that 1417 GPs had access to the IT-system at the time of measurement of the baseline. Using the different average number of GPs in the baseline with previous access could be up to 1526 GPs. This is higher than the baseline figure of 1 000 GPs cited in the Council Implementing Decision description of the target but does not affect the additional number of GPs that gained access to the system, which — as shown above — still exceeds the target.

The Commission considers that there is a clerical error in the text of the Council Implementing Decision in the sense that the baseline year was incorrectly (and, at any rate, imprecisely in terms of specific dating) stated as simply being "2021" and has undertaken the assessment on a revised basis. The summary document explains that the baseline was in fact measured on 29 September

2020, when approximately 40% of general practice clinics had access to the system. This is supported on page 3 of the Notice by the Danish Medicines Agency in the October 2020 edition of the magazine Monthly Journal of Rational Pharmacotherapy (*Månedsbladet for Rationel Farmakoterapi*), (Annex E). The Notice by the Danish Medicines Agency is an article which promotes the use of the IT-system for reporting side effects. The Notice states that the Danish Medicines Agency had already certified two IT providers (WinLPC and Clinea) at the time of publication, and that these two providers covered around 40% of all general practice clinics in the country. The notice informed these clinics that they could already use the IT-system to report side effects of medicines and announced to the rest of the general practice clinics that the IT-system would be implemented in all general practice medical management systems. A third provider (Ganglion) covering 0.8% of general practice clinics also provided these clinics with access to the IT-system before the implementation of the target and is counted in the baseline. This provider was not included in the notice in Annex E as the IT-system of this provider was temporarily suspended due to technical issues at the time of publication (see summary document section "Annex E"). The four remaining IT providers were certified by the Danish Medicines Agency to implement the IT-system between 23 December 2020 and 15 January 2021 (see summary document, section "Annex C") and the first side effects were reported between 11 January 2021 and 9 February 2021, as shown in the documentation from the Danish Medicines Agency dated 5 December 2022 (Annex D). These four providers form the group of additionally installed systems (i.e., those counting towards the achievement of the target relative to the baseline).

The Danish Medicines Agency shall ensure implementation of the IT-system concerning reporting of side effects of the COVID-19 vaccines for general practitioners to use.

The Danish Medicines Agency confirms that the IT-system is implemented in all general practice clinics and can be used by all GPs associated with a general practice clinic (Annex A). The Danish Medicines Agency has certified the IT providers for implementation of the IT-system (summary document, section "Annex C"), has communicated to general practitioners about the IT-system (Annex E and summary document section "Annex D"), and confirms receipt of reports on side effects of COVID-19 vaccines through the IT-system (Annex D). Copies of the first reports of side-effects of COVID-19 vaccines, as sent by GPs to the Danish Medicines Agency using the IT-system (DKMA webservice), are provided for each of the four IT providers in the (post-baseline) additional group (Annexes G to J). All reports are in accordance with the information provided by the Danish Medicines Agency in Annex D. Overall, this shows that the Agency has ensured the implementation of the IT-system for reporting side effects of COVID-19 vaccines (and other medicines) for general practitioners to use.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 11 Related Measure: C2.I5. Green transition of Agriculture and the environment			
	climate technologies in agriculture		
Name of the Milestone: Call for applications for the subsidy schemes for climate technologies in			
agriculture (brown biorefineries) is completed			
Qualitative Indica	ator: Call for tender has been completed	Time: Q4 2021	
Context:			
The measure aims to set up a subsidy scheme to promote and upscale the most promising technologies			
in relation to red	ucing emissions in the agricultural sector. The objective of the	e scheme shall be to	

demonstrate the use of the brown bio-refineries that have a large potential to reduce greenhouse gas emissions in agriculture.

Milestone 11 concerns the completion of the call for applications for the subsidy schemes for climate technologies in agriculture (brown biorefineries).

Milestone 11 is the first step of the implementation of the investment, and it will be followed by target 12 related to the realisation of one brown biorefinery allowing to test the technology in full scale. The investment has a final expected date for implementation in Q4 2025.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all constitutive elements) was satisfactorily fulfilled.
- ii. The publication of the call for applications, of 31 January 2022: Grants for projects that promote technologies for reducing greenhouse gas emissions within the agricultural sector (Pyrolysis Pool 2022)" (Indkaldelse af ansøgninger: Tilskud til projekter, som fremmer teknologier til reduk-tion af drivhusgasudledningen inden for landbrugssekto-ren (Pyrolysepuljen 2022)) showing that the competition is open to applications and press release of 10 February 2022 on the call for applications. The evidence is publicly available on the website of the energy authority and includes the mention of EU funds as well as the NGEU logo.
- iii. Announcement from the Danish Energy Agency, of 22 June 2022, published on the website of the Danish Energy Agency, of the approved projects, including a list of project names of approved projects; the evidence takes the form of a press release in Danish detailing the beneficiaries and the relevant projects including project names, expected outcomes and grants.
- iv. Description of the three supported projects provided by the Danish Energy Agency, including project descriptions and extract of the relevant parts of the technical specifications of the projects in line with the objectives of the scheme; the evidence takes the form of an overview in English of the three projects including names, grant amounts and expected outcomes.

The authorities also provided:

i. **Detailed overview of the criteria to be fulfilled to obtain support** provided by the Danish Energy Agency. This information was already included in the published call for applications.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The milestone shall be completed when the application round is closed, and the Danish Agricultural Agency announces on its homepage that the application round is closed.

The evidence provided in the Publication of the call for applications of 31 January 2022 and in the Press release of the call of 10 February 2022 meets the requirements from the Council Implementing Decision, as the detailed information included therein clearly sets out the opening and closing dates and the timeline for the process that relates to the application round, including the public nature of the call and the range of eligible applicants. It spells out the deadline of 1 April 2022 and details the EU wide competition among eligible private or public businesses or knowledge institutes including universities and technological institutes. The milestone in the Council Implementing Decision is further specified in the Operational Arrangements, which requires that the Danish Energy Agency, rather than the Danish Agricultural Agency shall be considered as the authority in charge of the implementation of the milestone. Therefore, the Danish Energy Agency took over as handling body for the subsidy

scheme, and the call for applications, as well as the announcement that the application round had closed, and a list of the approved projects were published on the official website of the Danish Energy Agency.

Furthermore, in line with the description of the measure, Denmark shall further invest in the upscaling of the most promising technologies on the market. The measure description also asserts that the research in new technologies not only benefits the climate and the environment but also job creation. To this end, the call for applications of 31 January 2021 described additional investments for the upscaling of the most promising technologies in terms of being cost effective and with a large potential for reduction of emission in the agriculture sector (page 3 of the published call). In this regard, a separate call for applications is to be published between 2023 and 2024 for the amount of 196 million DKK (page 4 of the published call). This is additional to the present call for applications of 31 January 2022 that is the subject of this milestone.

The present call for applications envisages three projects that have the potential to provide new jobs both directly and indirectly, as they allow for production sites producing biowaste that can be refined in a sustainable manner. Equally, the three projects represent new or innovative technologies that can be scaled up and developed commercially. It is precisely this potential for growth that benefits job creation, over and above the creation of jobs directly linked to the three projects' operations. The potential for each of the projects is set out as follows: (1) on page 3 of the Announcement from the Danish Energy Agency, for the project SkyClean it is said that the focus of the project is upscaling the pyrolysis technology), (2) on the same page 3 of the Announcement, the potential of the project Dall energy is indicated as starting the process of establishing a technology centre through creating the 10 MW demonstration plant that is the outcome of the project (3) and for the third project on page 4 of the Announcement the aim is described as further developing the chosen pyrolysis technology and establishing a full-scale flash pyrolysis plant. On page 5 of the call for applications of 31 January 2022 it is set out that the call aims to establish larger and pronounced development and demonstration projects, so-called lighthouse projects. A list of projects and project descriptions have been provided by the authorities and demonstrates that the three selected projects meet the objectives of the scheme. The authorities furthermore provided a detailed overview of the criteria to be fulfilled to obtain support, which is also included in the call for applications.

The objective of the scheme shall be to demonstrate the use of the brown bio-refineries that have a large potential to reduce greenhouse gas emissions in agriculture.

The call for applications issued on 31 January 2021 indicates that the objective of the scheme is to explore innovative technologies for their further promotion (page 1: support scheme for developments and demonstration projects in the pyrolysis technology a.o (*tilskudsordning for udviklings- og demonstrationsprojekter indenfor pyrolyseteknologi mv.*); page 4: basis to support a succeeding realisation of the potential for greenhouse gas reductions in the agricultural sector (*grundlag for at understøtte en efterfølgende realisering af potentialet for drivhusgasreduktioner l landbruget*). According to page 2 of the Announcement from the Danish Energy Agency, the call is aimed to develop technologies that support the green transition of the presence of oxygen (*Puljen er målrettet udvikling af teknologier, der skal fremme grøn omstilling af dansk landbrug, primært gennem pyrolyse – en proces, hvor biomasse opvarmes uden tilstedeværelse af ilt).* The pyrolytic method provides the agricultural sector with opportunities to eliminate biowaste stemming from animal production that would otherwise increase greenhouse gas emissions significantly. The scheme will thus provide technologies for the agricultural sector that allows the sector to continue its meat production while reducing related greenhouse gas emissions.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 13	Related Measure: C2.R1. Green transition of Agriculture and the Environment-
	Carbon rich soils

Name of the Milestone: Call for applications for the subsidy scheme for rewetting and taking out carbon rich soils out of production is completed

Qualitative Indicator: The call for applications for the subsidy scheme for taking out carbon rich soils out of productions is completed.

Context:

The measure aims to finance the alternative use of carbon rich soils to reduce the CO2 emission of Danish agricultural land. The scheme provides financial support to projects that reduce the CO2 emission of the agricultural sector while addressing objectives related to environment and climate issues.

Milestone 13 concerns the call for proposals that initiates the measure. The milestone identifies the objective of the scheme to be "to create financial incentives for farmers to take their carbon rich soils out of production and rewet them in order to prevent the carbon from being emitted into the atmosphere".

Milestone 13 is the first step of the implementation of the reform, and it will be followed by targets 14 and 15 related to effectively taking out of production a total of 4 700 hectares of carbon rich land in the context of awarded projects. The reform has a final expected date for implementation in Q2 2026.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. Announcement of the call for applications on the generic portal (<u>https://www.statens-tilskudspuljer.dk</u>) used by all Danish authorities linking the announcement to the publication on the website of the Danish Environmental Protection Agency, in an extract announcing the opening and closure dates of the call, showing the call is open to applications.
- Announcement of the Danish Environmental Protection Agency closing the application round of the call for proposals on the generic portal used by all Danish authorities (<u>https://www.statens-tilskudspuljer.dk</u>).
- iv. **List of approved projects** including dates, identifying numbers, project names, amounts and internal administrative specifications.
- v. **Overview of the projects selected in the first phase** for further exploration, including projects descriptions and extract of the relevant parts of the technical specifications (area in hectares and the proportion of the project area in hectares with a carbon content of more than 6 per cent) of the projects in line with the objectives of the scheme.

The authorities also provided:

- i. **Individual detailed project descriptions** including relevant parts of the technical specifications of each project in line with the objectives of the scheme, as an extract from the project database used by the Environment Protection Agency for the implementation of the call.
- Statutory order of 8 February 2022 establishing the legal basis for the call for applications proposals (BEK nr. 211 af 08/02/2022, "(Applicable) Order on the extraction of carbon-rich low-lying soils for the purpose of restoring natural hydrology (climatic low-lying projects))" (Gældende) Bekendtgørelse om udtagning af kulstofrige lavbundsjorder med henblik på genopretning af naturlig hydrologi (klimalavbundsprojekter)).

iii. **Presentation provided by the Environmental Protection Agency** (*Miljøstyrelsen*) to the European Commission on 18 November 2022 on the details of the subsidy scheme including overview of process details of geographical data and how they are collected.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The purpose of the scheme shall be to create financial incentives for farmers to take their carbon rich soils out of production and rewet them in order to prevent the carbon from being emitted into the atmosphere.

The statutory order of 8 February 2022 constitutes the legal act for publishing the call for applications. Chapter 15 §29 of the statutory order of 8 February 2022 states that this statutory order repeals the statutory order of 15 January 2021 that was the initial legal act for the publication of the call for applications. The statutory order of 8 February 2022 defines the general objective of the call for applications and sets the focus on taking carbon rich soils out of agricultural production with the purpose of rewetting them, as per Chapter 1 §1 of the aforementioned statutory order of 8 February 2022.

The financial incentive for farmers is set out in Chapter 1 §3 of the aforementioned statutory order of 8 February 2022 and is represented by the compensation for the loss of productive land that the owner of the plot is entitled to receive. The overall purpose is thus to re-establish the natural hydrology of low-level lands and to ensure that carbon contained in the land below water level is not released into the atmosphere due to artificially reduced water levels.

In accordance with Chapter 2 §6 of the statutory order of 8 February 2022, the criterion of 'carbon rich soils' is met by lands for which at least 60% have a minimum composition of 6% organic carbon material.

Furthermore, in line with the description of the measure, rewetting and taking carbon rich soils out of production shall contribute to a reduction of nitrogen emission as well. Chapter 4 §9 of the aforementioned statutory order of 8 February 2022 sets out that all lands subject to an application under the call will be further analysed to evaluate in detail the project proposed for rewetting the lands and must be subject to detailed calculations regarding their contribution to reductions of emissions of CO2, nitrogen and phosphorus. According to Chapter 6 §14 of the statutory order of 8 February 2022, compensation will only be granted for those lands which in this first phase are found to be falling within the criteria for the call. It is thus included in the process of the call that all lands will be rewetted in accordance with the initial objective of the measure.

It is set out in Chapter 7 §17 of the statutory order of 8 February 2022 that compensation is given in relation to the original use of the land, comprising three kinds of agricultural use forms that vary in intensity. The three kinds of eligible use are: growing crops (highest intensity use and highest compensation) livestock grassing (medium intensity use and compensation) and nature areas belonging to a farm that is not used for crops or livestock (lowest intensity use and compensation). The lands included in the applications for compensation under the call must be defined as agricultural land.

It is further set out in Chapter 8 §19 of the statutory order of 8 February 2022 that lands for which financial compensation is being granted must never be used for agricultural production, and that this must be codified through a legally binding act. The codification must include details about the limits for future use and set out that the land in question should respect the natural water levels and cannot include crops or forestry, nor any kind of livestock production that is based on additional feeding.

It is set out in Chapter 3 §8 of the statutory order of 8 February 2022 that applicants must include a clear geographical identification using a specific publicly available tool (*MiljøGIS*). Geodata are thus to be included in the application and allow for verifying the identification of agricultural land.

The evidence included as 'Individual detailed project descriptions' makes reference to this geographical identification for the calculation of the surface of each of the projects and sets out that each applicant in addition has declared that the eligibility criterion related to agricultural land is met.

The milestone shall be completed when the application round is closed, and the Danish Environmental Agency announces on its homepage that the application round is closed.

The announcement of the opening of the call for proposals and the announcement of the closing of the call for applications clearly indicate that the call was open between 1 February 2021 and 15 April 2021. The opening and closing dates have been obtained from the generic public portal (https://www.statens-tilskudspuljer.dk) where Danish authorities have the obligation, in line with national legislation, to announce all public calls. The announcement of the Danish Environmental Protection Agency closing the application round of the call for proposals that was published on the aforementioned public portal confirms that the call was closed on 15 April 2021.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 19	Related Measure: C3.IO1 Replacing oil burners and gas furnad	ces	
Name of the Mil	estone: Political agreement has been adopted on the allocatior	n of the funds for	
the schemes for	replacing oil burners and gas furnaces with electric heat pumps	and district	
heating.			
Qualitative Indic	ator: A political agreement between the government and a		
majority of the p	arliament is concluded and published on the relevant	Time: Q2 2021	
Ministry's webpa	ge		
Context:			
The measure aims to phase out oil and natural gas heating systems and replace them with electric			
heat pumps and	heat pumps and district heating powered by renewable energy. The provision of subsidies reduces		
the costs borne by consumers following the conversion to green and more energy efficient heating,			
thus helping to speed up the phasing out of oil burners and gas furnaces.			
Milestone 19 re	Milestone 19 requires reaching a political agreement between the Danish government and		
parliament on th	e allocation of funds for the support schemes for replacing of	oil burners and gas	

furnaces with electric heat pumps and district heating. The political agreement is to outline the allocation of 645 million DKK to support schemes. Milestone 19 is the first step of the implementation of the investment, and it will be followed by milestone 20 and target 21 related to the selection of recipients for the funding and the replacement of 10 100 individual oil burners or gas furnaces by heat pumps or district heating substitutes. The

investment has a final expected date for implementation in Q2 2026.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- Political agreement of 17 March 2021 named 'Agreement on the distribution of the subsidy pool to phase out oil and gas boilers from the Finance Act 2021 to the four subsidy pools from the Energy Agreement 2018 and the Climate Agreement for Energy and Industry, etc. 2020' (Aftale om fordeling af Tilskudspulje til udfasning af olie- og gasfyr fra Finansloven 2021 på de fire tilskudspuljer fra Energiaftale 2018 og Klimaaftale for energi og industri mv. 2020) published on the Ministry for Climate, Energy and Utilities's website and outlining the financial allocation for schemes funding the replacement of oil burners and gas furnaces

with electric heat pumps and district heating. The link to the political agreement, published 26 March 2021: <u>https://kefm.dk/aktuelt/nyheder/2021/mar/650-mio-kr-er-nu-fordelt-saa-flere-danskere-kan-faa-groen-varme</u>

iii. Political agreement of 30 November 2021 named the 'Agreement on the reprioritisation of 30 million DKK from the decoupling scheme and 9 million DKK from the Skrotning Scheme to the district heating pool in 2021' (Aftale om omprioritering af 30 mio. kr. fra Afkoblingsordningen og 9 mio. kr. fra Skrotningsordningen til Fjernvarmepuljen i 2021) which amends the financial allocation for the schemes funding the replacement of oil burners and gas furnaces with electric heat pumps and district heating.

The authorities also provided:

- i. An **explanation by the Ministry for Climate, Energy and Utilities,** dated February 2022, named the 'Reduction of primary energy consumption due to pools financed by recovery funds from the EU was reached'.
- ii. **Energy Agreement 2018 of 29 June 2018** (*Energiaftale 2018*) which is the political agreement from which this scheme is derived.
- iii. **Climate Agreement for Energy and Industry etc. 2020 of 22 June 2020** (*Klimaaftale for energi og industri mv. 2020"*) which is part of the Government's climate action plan proving the scaling up of an existing scheme.
- iv. Document provided by the Ministry for Climate, Energy and Utilities named 'Tagging of subsidies for renovation of buildings and conversion of heating technologies' dated 22 May 2021, explaining the methodology for estimation of primary energy consumption.
- v. **Government Order No. 1415 of 29 September 2020** (BEK nr. 1415 af 29/09/2020) named 'Order on subsidies for individual heat pumps for the scrapping of oil or gas boilers' (*Bekendtgørelse om tilskud til individuelle varmepumper ved skrotning afolie- eller gasfyr*) showing the legal basis for a subsidy to expand district heating grids into new areas.
- vi. **Government Order No. 2306 of 18 December 2020** (BEK nr. 2306 af 18/12/2020) named 'Order on grants for projects for the roll-out of district heating distribution networks' (*Bekendtgørelse om tilskud til projekter vedrørende udrulning affjernvarmedistributionsnet*) describing the subsidy scheme on the deployment of district heating distribution networks. It shows that households may be exempted from the fee that the Danish state-owned gas distribution company charges for decoupling.
- vii. **Danish Finance Act of 2021** which describes the measures i) Scrapping scheme (*Skrotningsordningen*); ii) Decoupling (*Afkoblingsordningen*); iii) District Heating pools (*Fjernvarmepuljen*); and how they will operate.
- viii. **Document provided by the Ministry for Climate, Energy and Utilities,** dated 24 November 2022, named **Annex J: The 645 million DKK specified**, explains how the 645 million DKK are divided amongst the subsidy schemes and the breakdown of the allocation of 645 million.
- ix. **Supplementary appropriations act for the financial year 2021** dated 27 January 2022 (*Forslag til lov om tillægsbevilling for finansåret 2021*) showing the new allocation of the schemes amounts adopted by Parliament. Link: *https://fm.dk/udgivelser/2022/januar/forslag-til-lov-om-tillaegsbevilling-for-finansaaret-2021/*

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the target.

The milestone shall be reached when a majority of the Danish parliament has entered an agreement on the allocation of the funds for the support schemes for replacing oil burners and gas furnaces with electric heat pumps and district heating.

Two political agreements (the agreement of 30 November 2021) were put forward by the governing party Social Democratic Party (48 seats; at the time according to the parliamentary website: https://www.ft.dk/-/media/sites/ft/pdf/folkestyret/valg-og-afstemninger/folketingsvalg-fra-

1953.ashx), Social Liberal Party (*Radikale Venstre*) (16 seats), Socialist People's Party (*Socialistisk*)(14 seats), Unity List (*Enhedslisten*) (13 seats) and The Alternative (*Alternativet*) (5 seats). Both agreements were agreed by parties adding up to 96 out of 179 members of the Danish parliament, confirming more than the 90 votes required for the majority.

The political agreement of 17 March 2021 establishes the distribution of the subsidy pool between the sub-schemes of the scheme for replacing oil burners and gas furnaces.

The scheme is made up of four sub-schemes which originate from the 'Energy Agreement 2018' and the 'Climate Agreement for Energy and Industry etc. 2020', as explained in further detail below in this assessment. There are three sub-schemes that are funded by the measure that this milestone represents: (i) Sub-scheme for district heating ("Fjernvarmepuljen"): shall provide a subsidy to expand district heating grids into new areas; (ii) Sub-scheme for decoupling ("Afkoblingsordningen"): the Danish state-owned gas distribution company charges a fee to cover the cost of decoupling. With this subsidy scheme, households may be exempted from this fee. (iii) Sub-scheme for scrapping ("Skrotningsordningen"). In addition, there are derived tax losses resulting from these three schemes, as well as from a fourth scheme (Building Pool *(Bygningspuljen)*) that is not directly related to this particular measure or its assessment.

In paragraphs 1 and 2 of the political agreement dated 17 March 2021 it is stated that the subsidies will be granted to households in order to speed up the phasing out of oil burners and gas furnaces and help reduce the costs incurred by consumers from switching to green heating. The allocation of funds is indicated in Table 1 of the political agreement and will be explained in further detail later in this assessment. Page 2 states that the date for the parties to reach an agreement was 19 March 2021. Subsequently, a new political agreement was put forward and agreed on 30 November 2021, which agreed a moderate readjustment to the allocation of funds. This new agreement amended the one of 17 March 2021 by reprioritising 30 million DKK from the decoupling scheme and 9 million DKK from the scrapping scheme to the district heating pool, in order to improve the take-up of the schemes.

Furthermore, in line with the description of the measure, the scheme aims at phasing oil and natural gas out of the heating system and replacing them with electric heat pumps and district heating from renewable sources. This aim is stated in the 'Climate Agreement for Energy and Industry etc. 2020', where subsection "Phasing out of individual oil and gas boilers" (*Udfasning af individuelle olie- og gasfyr*), states that 'oil and natural gas must be removed from the heating system and green electricity and green district heating must be inserted instead. To speed up the phasing out of oil and gas boilers and reduce the cost to consumers of the green heat transition, the adjustments of heat taxes are combined with subsidies for conversions to green solutions.'

Furthermore, in line with the description of the measure, the investment that this milestone represents shall consist in the provision of subsidies to speed up the phasing out of oil burners and gas furnaces and to reduce the cost to consumers of the conversion to green heating. Chapter 1 §1 paragraph 1 of Government Order No. 1415 of 29 September 2020 and Chapter 1 §1 paragraph 1 of Government Order No. 2306 of 18 December 2020, lay out the legal framework for two of the three relevant sub-schemes, the Scrapping scheme and District heating pool scheme respectively, outlining that the subsidies will be in the form of a grant. For the decoupling scheme (*Afkoblingsordningen*), rather than awarding a grant, the sub-scheme is exempted from the decoupling fee, which in principle, also has a favourable financial impact on households by reducing their costs incurred when decoupling from the gas system. The support available for this third sub-

scheme is detailed on page 3228 §29 no. 130 subsection 1 through 7 of the 'Danish Finance Act 2021'.

Furthermore, in line with the description of the measure, the support provided by the Danish Recovery and Resilience Plan shall scale up an existing measure. The milestone in the Council Implementing Decision requires the schemes to originate from the 'Energy Agreement 2018' (Energiaftale 2018) and the 'Climate Agreement for Energy and Industry etc. 2020' (Klimaaftale for energi og industri mv. 2020). The Scrapping Scheme (Skrotningsordningen) can be found in the 'Energy Agreement 2018' under subsection "Support for individual heat pumps when scrapping oil boilers" (Støttepulje til individuelle varmepumper ved skrotning af oliefyr), while the Decoupling and District Heating pools (Afkoblingsordningen & Fjernvarmepuljen) can be found in the 'Climate Agreement for Energy and Industry etc. 2020' under subsection "Phasing out of individual oil and gas boilers" (Udfasning af individuelle olie- og gasfyr). Both of the aforementioned documents were agreed prior to the negotiations of the Recovery and Resilience Plan, and therefore represent a preexisting measure that is extended through the measure under consideration in this milestone. Table 2 of the political agreement of 17 March 2021 shows the allocation of funds from the 'Energy Agreement 2018' and the 'Climate Agreement for Energy and Industry etc. 2020' as well as the additional funds from the Danish Finance Act 2021 from which the RRF funds have been distributed. Considering that the total amounts for Table 2 are higher than the sums listed in 'Annex J: the 645 million specified' for the same sub-measures, this also proves the upscaling of already existing measures.

A political agreement between the government and a majority of the parliament is concluded and published on the relevant Ministry's webpage.

The political agreement of 17 March 2021, as reached by the parties involved, was published in the form of a press release on the Danish Ministry for Climate, Energy and Utilities website. The second political agreement of 30 November 2021, amending the allocation of funds was not published in the Danish Ministry for Climate, Energy and Utilities website.

The Council Implementing Decision states that the political agreement should be concluded and published. Whilst the political agreement of 30 November 2021 was not published, its conclusion is evidenced by the supplementary appropriations act for the financial year 2021, which demonstrates that this political agreement was followed. This also proves that the political agreement of 17 March 2021 was superseded by the political agreement of 30 November 2021 in terms of budgetary execution and that the scheme was conducted using the amended allocation. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

The political agreement shall be on how 645 million DKK is to be distributed among the support schemes to phase out oil burners and gas furnaces.

Table 1 named 'Economic profile, subsidy pools for phasing out oil and gas boilers – funds allocated with the Finance Act 2021' within the Political agreement of 17 March 2021 shows the distribution of 650 million DKK in expenditure funds that were allocated by the Finance Act 2021 to phase out oil and gas boilers for the years 2021 to 2024 and that were split amongst four schemes (in addition to 300 million DKK already located separately to the 'Building Pool' in 2021 in connection with the Finance Act 2021): (i) District heating pool; (ii) Scrapping scheme (iii) Building pool; and (iv) Decoupling scheme, and including in the final row, the derived tax losses of the four schemes in 2021-2025 for this allocation. As already outlined above, only three of the schemes in this table were funded by this particular sub-measure (Component 3, investment 1), and these are the District heating scheme (*Fjernvarmepuljen*) with 340 million DKK, the Scrapping scheme (*Skrotningsordningen*) with a total of 20 million DKK, and 125 million DKK were distributed to subsidies for decoupling private house owners from the gas system within the Decoupling scheme (*Afkoblingsordningen*). These add up to 485 million DKK in total and this sum corresponds to the measures costed by the RRF, while the Building pool scheme is funded by another measure within

the Danish Recovery and Resilience Plan (Component 3, investment 4). Additionally, the table shows the derived tax losses for all four schemes adding up to 260million DKK. As 100million DKK of the total derived tax losses are attributed to the derived tax losses of the Building Pool, as explained in the summary document, the remaining 160 million DKK in tax losses are derived from the three schemes that fall under the sub-measure at hand. This sums the total costs for the three schemes including the derived tax losses to the total of 645 million DKK required by the Council Implementing Decision. 'Annex J: the 645 million DKK specified' extracts the relevant tax losses for the three schemes to 160 million DKK and reduces it with the 100 million DKK from the original 260 million DKK quoted in the Table 1 of both political agreements. The derived tax losses are solely funded by national funds and are therefore not considered further for the sake of this assessment.

Following this political agreement of 17 March 2021, another agreement was reached, as per the political agreement of 30 November 2021. A small proportion of funds were reallocated amongst the four aforementioned schemes, so as to ensure full disbursement of the funds. 30 million DKK were reallocated from the decoupling scheme (Afkoblingsordningen) and 9 million DKK reallocated from the scrapping scheme (Skrotningsordningen) to the district heating pool (Fjernvarmepuljen) as the latter scheme received more applications. Thus, a total amount of 39 million DKK, as depicted in Table 1 of the political agreement dated 30 November, was reallocated in order to ensure maximization of the efforts for phasing out oil and gas boilers through greater uptake of subsidies, as explained in paragraph 1 of the political agreement of 30 November 2021. The new allocation from Table 1 of the political agreement dated 30 November 2021 is as follows: (i) District heating pool with 379 million DKK, (ii) scrapping scheme with 11 million DKK; (iii) Building pool with 465 million DKK (iv) Decoupling mechanism with 95 million. Summing only the three schemes covered by this Recovery and Resilience Plan measure ((i), (iii) and (iv)), these add up to 485 million DKK, which still corresponds to the original costing for the measure at hand. Table 1 of the document 'Annex J: specifying the 645 million DKK' provided by the Ministry for Climate, Energy and Utilities dated 24 November 2022, includes the 160 million derived tax losses that are not funded by the Recovery and Resilience Facility, but are included in the 645 million DKK of the Council Implementing Decision.

Furthermore, in line with the description of the measure, the scheme for district heating *(Fjernvarmepuljen)* shall provide a subsidy to expand district heating grids into new areas. With an allocation of 340 million DKK, as per political agreement of 17 March 2021, the sub-scheme targets the expansion of the district heating network by subsidising the expansion of the grid into areas currently not reached by the district heating network. This is described in §3 paragraph 2 of Government Order No. 2306 of 18 December 2020, the funds are granted per conversion to the newly rolled out district heating from gas or oil furnaces. On page 3228 of the 'Danish Finance Act 2021' (no. 129), which Government Order No. 2306 of 18 December 2020 refers to, clarifies that the minister may grant subsidies for district heating areas. On §18 of Government Order No. 2306 of 18 December 2020 is clarified that the legal framework for the district heating pool enters into force 10 January 2021. Moreover, it is shown in table 1 and 2 in the political agreement of 17 March 2021, that the funds from the Danish Recovery and Resilience Plan are additional allocations to the already nationally financed scheme, thereby upscaling the measure, as explained previously in our assessment.

Furthermore, in line with the description of the measure, for the scheme for decoupling *(Afkoblingsordningen)* the Danish state-owned gas distribution company charges a fee to cover the cost of decoupling. With this subsidy scheme, households may be exempted from this fee. Page 3228 §29, no. 130 subsection 1 through 7 of the evidence Danish Finance Act 2021, shows that 125 million DKK were allocated to the subsidy for decoupling private house owners from the gas system, which is described as a fee exemption scheme, with an amount equivalent to that of the Danish utility regulator.

Furthermore, in line with the description of the measure, the scheme for scrapping *(Skrotningsordningen)* shall provide a subsidy for companies that offer heat pumps on subscription for private year-round housing of 20 million DKK, as per Political agreement of 17 March 2021, or the new allocation of 11 million DKK as per Political agreement of 30 November 2021 and 'Annex J: The 645 million DKK specified', is allocated heat pumps on subscription for year-round private housing, as described in §1 paragraph 1 and 2 of Government Order No. 1415 of 29 September 2020.

The measure shall achieve at least a 30% reduction in primary energy demand at the level of the building.

Paragraph 2 and Table 1 of the document 'Reduction of primary energy consumption due to pools financed by recovery funds from the EU' provide the calculations for the estimated reduction on how much the consumption of primary energy will decrease as a result of the shift from oil burners and gas furnaces to electric heat pumps and district heating. In total, the pools will reduce the primary energy consumption by 276 GWh/year out of a total of 680 GWh/year affected heat. The total estimated reduction in primary energy is calculated at around 41%, which meets the requirement that the measure shall achieve at least a 30% reduction in primary energy demand at the level of the building.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 22	Related Measure: C3.I03. Energy efficiency, gree	en heating and CCS - Energy		
	efficiency in industry	с с <i>і</i>		
Name of the Mile	estone: Entry into force of the legal framework for	a subsidy scheme for energy		
efficiency in indu	stry.			
Qualitative Indica	ator: The parliament has adopted the legal act			
setting up the sul	osidy scheme, published and it has entered into	Time: Q3 2021		
force.				
Context:				
The measure aim	s to speed up energy efficiency interventions and	d the transition to green energy in		
industry through	the scale up of an existing national subsidy sch	neme. The scheme targets energy		
savings in all pr	ivate businesses and the distribution of funds	through a competitive selection		
	on a criterion of highest energy savings per subsid			
	cerns the adoption, publication, and entry into fo	rce of the legal framework for the		
	or energy efficiency in industry.			
	he first step of the implementation of the invest			
	d target 24, related to the completion of the a			
-	scheme, and the achievement of a reduction of the final energy consumption of Danish industry by at			
least 16 petajoule. The investment has a final expected date for implementation in Q4 2024.				
Evidence provide	d:			
In line with the	verification mechanism set out in the Operation	onal Arrangements, the following		
	evidence was provided:			
•	document duly justifying how the milestone (inclu	uding all the constitutive elements)		
	factorily fulfilled.	- ,		
	ated Act No. 1897 of 1 October 2021 (LBK nr. 1897	' af 01/10/2021) titled Order of the		
Act on th	e promotion of savings in energy consumption	Bekendtgørelse af lov om fremme		
af besp	arelser i energiforbruget), published in the	Danish official online Journal		

Retsinformation.dk concerning the Act on the promotion of savings in energy consumption. The link can be found here: <u>https://www.retsinformation.dk/eli/lta/2021/1897</u>

iii. Administrative Order No. 2237 of 1 December 2021 (BEK nr. 2237 af 01/12/2021) titled Order on grants for energy savings and energy efficiency improvements in commercial enterprises published in the Danish official online Journal Retsinformation.dk on grants for energy savings and energy efficiency improvements in commercial enterprises. The link can be found here: <u>https://www.retsinformation.dk/eli/lta/2021/2237</u>

The authorities also provided:

- i. Political agreement on energy, **Energy Agreement 2018** (*Energiaftale*) of 29 June 2018, published on the Ministry for Taxation website (*Skatteministeriet*) that sets out the action plan towards the green transition. The link can be found here: <u>https://www.skm.dk/aktuelt/publikationer/politiske-udspil-og-aftaler/energiaftale-2018/</u>
- Administrative Order No. 1414 of 29 September 2020 (BEK nr 1414. Link: ii. https://www.retsinformation.dk/eli/lta/2020/1414 af. 29/09/2020) titled Order on grants for energy savings and energy efficiency improvements in commercial enterprises (Bekendtgørelse tilskud til energibesparelser oq energieffektiviseringer от erhvervsvirksomheder) published in the Danish official online Journal Retsinformation.dk showing the measure derives from an existing scheme. The link can be found here: https://www.retsinformation.dk/eli/lta/2020/1414

Analysis:

The justification and substantiating evidence provided by Denmark authorities covers all constitutive elements of the milestone.

Legal framework for a subsidy scheme for energy efficiency in industry has been adopted by the parliament, published and entered into force.

The publication of the political agreement on energy, the Energy Agreement 2018 of 29 June 2018, was followed by the adoption of Consolidated Act No. 1897 of 1 October 2021 setting the legal basis for energy efficiency subsidy schemes in general, and of Administrative Order No.2237 of 1 December 2021 on grants for energy savings and energy efficiency improvements in commercial enterprises. Consolidated Act No. 1897 of 1 October 2021 and Administrative Order No. 2237 of 1 December 2021 were published on the official website "retsinformation.dk", the joint state legal information system which provides access to all applicable laws, executive orders and circulars. Chapter 1 of Consolidated Act No. 1897 of 1 October 2021 establishes the basis of the legal framework for the subsidy scheme for "energy savings and energy efficiency improvements in commercial enterprises". Administrative Order No. 2237 of 1 December 2021 sets out the detailed provisions for the subsidy scheme for "energy savings and energy efficiency improvements in commercial enterprises" and has its legal basis in Chapter 1 paragraph 1 of Consolidated Act No. 1897 of 1 October 2021 sets No. 1897 of 1 October 2021 sets No. 1897 of 1 December 2021 sets No. 1897 of 1 December 2021 sets No. 2237 of 1 December

In line with national legislation, the Consolidated Act No. 1897 of 1 October 2021 was approved by the Ministry for Climate, Energy and Utilities. In accordance with Danish Law, the approval of a consolidated act is an administrative step made by the competent ministry and does not require going through the parliamentary procedure.

Chapter 14 §4 of the Consolidated Act No. 1897 of 1 October 2021 indicates that the Consolidated Act entered into force on 1 July 2021 and was signed by the Danish Energy Agency on 1 October 2021. Chapter 8 §25 of the Administrative Order No. 2237 of 1 December 2021 indicates that the Administrative Order entered into force 1 January 2022 and was signed by the Ministry for Climate, Energy and Utilities on 1 December 2021.

Furthermore, in line with the description of the measure, the initiative aims to speed up energy efficiency measures in industry and is expected to lead to a reduction in greenhouse gas emissions.

Chapter 1 §1 paragraph 1 of Administrative Order No. 2237 of 1 December 2021 states that the Order aims at 'achieving reductions in the use of fossil fuels in connection therewith' and as a result, this will help transition to lower energy consumption in industry which would ensue in the reduction of greenhouse gas emissions.

Furthermore, in line with the description of the measure, the scheme scales up an existing national scheme by building on the originally and exclusively nationally funded scheme which was adopted in the framework of the political agreement on energy, Energy Agreement 2018 and which originates from Administrative Order No.1414 of 29 September 2020 on 'Order on grants for energy savings and energy efficiency improvements in business enterprises'. This political agreement of 29 June 2018 was agreed by a majority of the Parliament, consisting of the Government at the *time (Venstre, Liberal Alliance and Det Konservative Folkeparti*) and other parties including: Social Democratic Party, Danish People's Party, Unity Party, Alternative Party, Radical Left and Socialist People's Party (*Socialdemokratiet, Dansk Folkeparti, Enhedslisten, Alternativet, Radikale Venstre and Socialistisk Folkeparti*), and includes on page 9 a subsidy scheme for "Energy savings and energy efficiency improvements in commercial enterprises", as mentioned under section 'Targeted energy saving efforts' (*Målrettet energispareindsats*) paragraphs 1 and 2. By allocating additional funding to the existing scheme mentioned in the Energy Agreement 2018, Consolidated Act No. 1897 of 1 October 2021 and Administrative Order No. 2237 of 1 December 2021 scale up the existing initiative.

Furthermore, in line with the description of the measure, the subsidy scheme "Energy savings and energy efficiency improvements in commercial enterprises" targets energy savings in all private businesses. Chapter 3 paragraph 2 of Administrative Order No. 2237 of 1 December 2021 states that all non-public enterprises are eligible for this grant scheme, which is equivalent to all private businesses, as required in the Council Implementing Decision. As included in Chapter 1 §3 point 4 of Administrative Order No. 2237 of 1 December 2021, the scope of the overall energy savings envisaged by the scheme can be determined on the basis of the "final energy consumption", which is an official statistical definition prescribed by article 2 paragraph 3 of the Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency. "Final energy consumption" is thus defined as representing all energy supplied to industry, transport, households, services and agriculture. It excludes deliveries to the energy transformation sector and the energy industries themselves. This definition, also outlined in Chapter 1 §3 point 4 of Administrative Order No. 2237 of 1 December 2021, sets out the basis for calculating the energy savings in industry achieved by the subsidy scheme "Energy savings and energy efficiency improvements in commercial enterprises". The scheme does not cover deliveries to the energy transformation sector and the energy industry itself, as these do not qualify as end users, in line with article 2 paragraph 3 of the energy efficiency directive 2012/27/EU. Chapter 1 §3 point 4 of Administrative order No. 2237 of 1 December 2021 refers to this exclusion.

The funds shall be allocated on the basis of a competitive selection procedure.

In line with the provisions of Chapter 4 §11 paragraph 2 of Administrative Order No. 2237 of 1 December 2021, funds are to be allocated through application rounds. Calls by the Danish Energy Agency are published on their respective website as per Chapter 4 §11 paragraph 1 of Administrative Order No. 2237 of 1 December 2021. Furthermore, the calls are also published on the website statenstilskudspuljer.dk of the Agency for Public Finance and Management that falls under the responsibility of the Ministry of Finance, which compiles information on all central government schemes from all ministries on one platform. Chapter 4 §11 paragraph 2 of Administrative Order No. 2237 of 1 December 2021 describes that the length of the application period has to be specified in the publication of the calls before the opening of the application rounds. Applications are ranked based on the bidding price per saved kWh, according to the procedure laid out in Chapter 4 §12 paragraph 3 of Administrative Order No. 2237 of 1 December 2021. The selection is therefore based on the projects that would result in the highest energy efficiency savings. Moreover, Chapter 2 §5 paragraph 2 of Administrative Order No. 2237 of 1 December 2021 outlines that the Danish Energy Agency caps the total grant amount to 15 million EUR per investment project. Therefore, it can be concluded that Administrative Order No. 2237 of 1 December 2021 provides for a competitive selection procedure for granting the subsidy scheme for energy efficiency in industry.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 25	Related Measure: C3.I03 Energy efficiency, green heating and CCS - Energy	
	renovations in public buildings	
	estone: The government issues statutory order establishing a subsidy scheme for	
	ons in public buildings.	
	cator: The statutory order is published and shall	
-	al framework for model/set-up for the subsidy Time: Q4 2021	
	gy renovations in public buildings	
Context:		
	ns to support, through a subsidy scheme, energy renovations of regional and municipa	
	gets buildings with the lowest energy performance certificate standards, as well as	
-	ing heated by oil burners and gas furnace.	
	ncerns the publication of the statutory order establishing the subsidy scheme for	
	ons in public buildings, defining the conditions for receiving funding.	
	he first step of the implementation of the investment, and it will be followed by target	
	ne improvement in the energy performance of 40% of the municipal and regiona	
	-G rating. The investment has a final expected date for implementation in Q4 2025.	
Evidence provid	ed:	
evidence was pro i. Summar was satis ii. Governn on subs building og regio	e verification mechanism set out in the Operational Arrangements, the following ovided: Ty document duly justifying how the milestone (including all constitutive elements sfactorily fulfilled. nent Order No. 1816 of 14 September 2021 (BEK nr 1816 af 14/09/21) titled Orde idies for energy improvements and digital solutions in municipal and regiona s (<i>Bekendtgørelse om tilskud til energiforbedringer og digitale løsninger i kommunale</i> <i>nale bygninger</i>) published in the online Danish Official Journal 'Retsinformation.dk' <u>www.retsinformation.dk/eli/lta/2021/1816</u>	
•	and substantiating evidence provided by the Danish authorities covers all constitutive	
elements of the		
	innestorie.	
	s reached when the government has published the statutory order. the Council Implementation Decision, the Danish government has published the	
statutory Government Order No. 1816 of 14 September 2021 establishing the legal framework		
defining the subsidy scheme for energy renovations in public buildings. This Government Order was		
published in the	online Danish Official Journal 'Retsinformation.dk', the joint state legal information	
system which pi	rovides access to all applicable laws, executive orders and circulars. Its article §34	
indicates that th	e Government Order entered into force on 20 September 2021.	
I his legal frame	work shall define the conditions for receiving funding under the subsidy scheme fo	

This legal framework shall define the conditions for receiving funding under the subsidy scheme for energy renovations in public buildings, such as maximum grant size or target group.

As required by the Council Implementation Decision, articles §1 to §7 of Government Order No. 1816 of 14 September 2021 define the conditions for receiving funding under the subsidy scheme for energy renovations in public buildings. The conditions for receiving funding include:

- i. Maximum grant size: Chapter 3 §12 paragraphs 3 and 4 of the Government Order No. 1816 define the upper and lower limits of the grants per project. As per Chapter 3 §12 paragraph 5 of the Government Order No. 1816, in case of full disbursement of the allocated funds to the subsidy scheme, each municipality can obtain a maximum total grant of 4 million DKK. If there is no full disbursement of the allocated funds of the subsidy scheme, this threshold may be surpassed as defined in Chapter 3 §12 paragraph 5 of this Government Order.
- ii. The target group: Chapter 1 §1 paragraph 1 of the Government Order No. 1816 identifies that the target group of the statutory order is composed of the regional and municipal buildings with the lowest energy performance as well as the buildings still being heated by oil burners and gas furnace.

Chapter 1 §6 paragraph 1 of the Government Order No. 1816 of 14 September 2021 sets out that the subsidy targets energy savings renovations and the transition to green heating in buildings.

Furthermore, in line with the description of the measure, the subsidy targets energy renovations in regional and municipal buildings with the lowest energy performance certificate standards. The Government Order establishes in its article §1 paragraph 1 and article §3 that it targets the aforementioned actions and buildings, stipulating that the Danish Energy Agency can only grant subsidies to projects made in buildings with energy certificate standards rated D, E, F and G which are the four lowest tiers of the Danish energy certificate standards.

Furthermore, in line with the description of the measure, municipal and regional buildings that are heated by oil burners and gas furnaces are also eligible for the scheme, as they hold very low rated energy certificates by default, as defined in §6 paragraph 3 (a) and (b) of Government Order No. 1816 of 14 September 2021.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 27	Related Measure: C3.I5 Carbon Capture Storage (CCS) Poter	ntial	
Name of the Mi	Name of the Milestone: Award of contracts for selected applicants for the CCS feasibility study		
Qualitative Indicompleted.	cator: Call for applicants and selection of fund receivers	Time: Q4 2021	
Context:			
The measure aims to conduct a study of the technical and economic feasibility of CO2 storage in depleted oil and gas fields in the Danish part of the North Sea, through development, testing and demonstration of CO2 storage.			
Milestone 27 concerns the award of contracts for selected applicants for the carbon capture and storage (<i>hereinafter referred to as "CCS"</i>) feasibility study, selected after an open selection procedure.			
Milestone 27 is the first step of the implementation of the measure, and it will be followed by milestone 28 which is the final milestone related to the completion of the feasibility study. The investment has a final expected date for implementation in Q4 2023.			
Evidence provid	ed:		
In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:			
	ry document duly justifying how the milestone (including all c sfactorily fulfilled.	onstitutive elements)	
	of the call for applications for funding from the Ene		

Demonstration Programme (*Energiteknologiske Udviklings- og Demonstrationsprogram*) EUDP 2021-II, in original Danish and the English translation, showing that the call is open to applications and including relevant parts of specification proving alignment with the description of the target and investment in the CID annex.

- iii. **A copy of selection criteria and conditions** for development and demonstration projects, as included in the call for applications.
- iv. **Description of the awarded project** *Greensand Phase 2*, **including terms of reference**, from the EUDP website. Link: <u>https://eudp.dk/projekter/project-greensand-fase-2</u>
- v. Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark, dated 9 December 2021, notifying the award of the project *Greensand Phase 2* and grant agreement for year 2021.
- vi. Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark, dated 31 January 2022, notifying the award of the project *Greensand Phase 2* and grant agreement for year 2021 and 2022. The English translation was also provided.

The authorities also provided:

- i. Announcement of the opening of the call for applications from the Danish Energy Agency website, dated 24 June 2021. Link: <u>https://eudp.dk/nyheder/mere-500-mio-kroner-til-nye-energiprojekter</u>
- ii. Announcement of the awarded project published on the EUDP website, including a description of the project. Link: <u>https://eudp.dk/nyheder/eudp-stoetter-groen-energiteknologi-med-554-mio-kroner</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The selection of applicants for the CCS feasibility studies is completed.

Page 5, section "Carbon storage in the North Sea", of the Call for applications for funding from the Energy Technology and Demonstration Programme (Energiteknologiske Udviklings- og Demonstrationsprogram) EUDP 2021-II provided by the authorities, includes the CCS feasibility study. The call was open from 24 June 2021 to 3 September 2021 as referenced in the Announcement of the opening of the call for applications. The deadline for applications can also be found on pages 1 and 4 of the Call for applications for funding from the Energy Technology and Demonstration Programme (Energiteknologiske Udviklings- og Demonstrationsprogram) EUDP 2021-II. The awarded project for the CCS feasibility study was publicly announced by EUDP on its website on 14 December 2021, as indicated in the Announcement of the awarded project from the EUDP website. The EUDP notified the project applicant INEOS Oil & Gas Denmark that their project had been selected as stated in the letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark, dated 9 December 2021. The letter contains the grant information for the 2021 tranche of the grant and project agreement. A subsequent letter from EUDP to the applicant, dated 31 January 2022, contains the grant information including both the 2021 and 2022 tranches of the grant and the revised project agreement. The funding for the project was divided equally between the 2021 National Budget and the 2022 National Budget with DKK 98.5 million per tranche, totalling 197 million. The funds for 2022 only became available after the entry into force of the Danish Finance Act for the Financial Year 2022 (Finanslov for finansåret 2022), as explained in paragraph 7 on page 5 of the Call for applications, hence the second letter dated 31 January 2022 contains the funding information including the 2022 tranche. As described on page 5 of the Call for applications, this is the only round of applications for the feasibility study. As the awarded project has been selected and notified, the selection of applicants is completed. The Council Implementing Decision states that the milestone shall be reached when the selection of applicants for the CCS feasibility is completed. Only one project was awarded and thus one applicant selected. The project was selected following an open selection procedure and is a feasibility study corresponding to the requirements of the Council Implementing Decision as described below. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

Furthermore, in line with the description of the measure, the above-mentioned call targets the development and demonstration of the technical and economic feasibility of CO2 storage in depleted oil and gas fields in the Danish part of the North Sea. As stated on page 5 of the Call for applications (English version), the call was open to "projects which deal with development and demonstration of technologies related to carbon storage in the North Sea", specifically in "end-oflife oil and gas fields in the Danish part of the North Sea". Moreover, on page 1 of both the Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark dated 9 December 2021 and the Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark dated 31 January 2022, it is specified that "the application meets the established criteria, which appear from the EUDP 2021-II call". This specification in the letters of award shows alignment with the description of the target and measure description in the Council Implementing Decision. The Announcement of the awarded project from the EUDP website includes a short description of the awarded project (Project Greensand Phase 2) and shows that the awarded project focuses on CO2 storage in the Nini field in the Danish part of the North Sea. A more detailed description including the terms of reference can be found in the Description of the awarded project Greensand Phase 2. Project Greensand Phase 2 aims to generate the necessary knowledge to subsequently store 0.5 to 1.5 million tons of CO2 in the Nini gas field, by raising the technology readiness level (hereinafter referred to as "TRL") of the project from TRL 5 (technology validated in relevant environment - industrially relevant environment in the case of key enabling technologies) to TRL 8 (system complete and qualified) and by providing necessary technical documentation for a subsequent storage site permit application.

Furthermore, in line with the description of the measure, the support does not cover investments needed to implement operational CO2 storage facilities but only a feasibility study, as described above. Page 9 of the Call for applications for funding from the Energy Technology and Demonstration Programme *(Energiteknologiske Udviklings- og Demonstrationsprogram)* EUDP 2021-II, section 2.8, specifies which type of projects would not be eligible for funding, which include the deployment of existing technology, the commercial operation of plants, the expansion of infrastructure among others. On page 1 of both the Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark dated 9 December 2021 and the Letter from the EUDP secretariat addressed to INEOS Oil & Gas Denmark dated 31 January 2022, it is specified that "the application meets the established criteria, which appear from the EUDP 2021-II call." This ensures that the selected project is a feasibility study and will not include investments to implement operational CO2 storage facilities.

Furthermore, in line with the description of the measure, further development, testing and demonstration of CO2 storage will be carried out in order to determine the technical and financial feasibility before any depleted gas and oil fields become operational. The criteria of the Call for applications for funding from the Energy Technology and Demonstration Programme *(Energiteknologiske Udviklings- og Demonstrationsprogram)* EUDP 2021-II, section 2.1, states that demonstration projects (TRL 6-8), such as *Project Greensand Phase 2* (TRL 5-8), involve experimental testing of a technology with the aim of subsequent introduction to the market or further development before market introduction. As stated on pages 1 and 2 of the description of the awarded project Greensand Phase 2, the project will provide the necessary technical documentation and the reports for a subsequent CO2 storage site permit application. The awarded project will also assess the monitoring technologies that enable environmentally friendly CO2 capture and storage.

Open selection procedure.

In accordance with the requirement of the Council Implementing Decision on selecting applicants on the basis of an open call, the call for applications was announced publicly on the EUDP website, as seen in the Announcement for the opening of the call, available at the following link: <u>https://eudp.dk/nyheder/mere-500-mio-kroner-til-nye-energiprojekter</u>. The Danish Energy Agency also made a press release announcing the application round and describing the earmarked pool for the CCS feasibility study, available at the following link: <u>https://ens.dk/presse/ny-pulje-skal-fremme-co2-lagring-i-nordsoeen</u>. The selection criteria are detailed on page 7 of Call for applications for funding from the Energy Technology and Demonstration Programme (*Energiteknologiske Udviklings- og Demonstrationsprogram*) EUDP 2021-II. As per page 10, the description of eligibility criteria under section 3.1 of the call does not contain unreasonable restrictions to access, given that all public and private enterprises as well as knowledge institutions registered in the Danish Central Business Register. Given the public nature of the call, the fact that applications could be submitted from 24 June 2021 to 3 September 2021, the explicit selection criteria and open access, it is considered that the selection followed an open selection procedure.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 31

Related Measure: C4.I1. Investment window

Name of the Milestone: A political agreement on an investment window has been adopted by the Danish Parliament and the relevant legislative procedures in the Parliament have been launched.

Qualitative Indicator: The political agreement on the green tax reform including	
the investment window is signed and published on the Ministry of Taxation's	Time: Q4 2020
webpage.	

Context:

The aim of this measure is to establish an investment window for business investment. Investments within this investment window will benefit from a tax rebate, implying an economic incentive for such investments. The measure is part of the green tax reform, of which the investment window is an integral part, to foster economic activity in the short-term leading to reduced greenhouse gas emissions in the longer term.

Milestone 31 requires the Danish parliament to adopt a political agreement on an investment window and to launch the relevant legislative procedure. The political agreement constitutes a political commitment for the concerned political parties to support a given political initiative. On this basis the legislative procedures are launched.

Milestone 31 is the first step of the implementation of the investment, and it will be followed by milestone 32 and target 33, related to the adoption of the legislation and its entering into force and to 1000 companies having used the tax deduction provided by the investment window, respectively. The investment has a final expected date for implementation in Q2 2024.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including the constitutive elements) was satisfactorily fulfilled.
- ii. **Political agreement on green tax reform** (*Aftale om Grøn skattereform*) of 8 December 2020 as published on the website of the Ministry of taxation and the link: <u>https://www.skm.dk/aktuelt/presse-nyheder/pressemeddelelser/bred-aftale-skattereform-kickstarter-groen-omstilling/</u>

The Ministry of Taxation links to the agreement from the initial publication on the Ministry of Finance website. The link can be found:

https://fm.dk/nyheder/nyhedsarkiv/2020/december/bred-aftale-om-groen-skattereformbaner-vej-for-groen-omstilling-i-erhvervslivet/ The authorities also provided:

i. Legislative proposal on the green tax reform (Draft Law No. L 178 Proposal to Act amending the Depreciation Act, the Tax Assessment Act; the Pension Return Tax Act and the Sulphur Tax Act), Lovforslag nr. L 178 (Forslag til Lov om ændring af afskrivningsloven, ligningsloven, pensionsafkastbeskatningsloven og lov om afgift af svovl), published on 24 February 2021 in the online Danish Official Journal Retsinformation.dk. The link can be found here: https://www.retsinformation.dk/eli/ft/202012L00178

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

A majority of the Danish Parliament has entered an agreement on the green tax reform including the investment window.

On 8 December 2020 a political agreement on the green tax reform was reached. At page 4 in the chapter on compensatory measures (kompensation i forbindelse med første fase af grøn skattereform), it is stipulated that the agreement includes an investment window. The political agreement on the green tax reform, including the investment window, has been reached by a broad majority in the Danish Parliament, thereby ensuring that the agreement should hold also in case of a change in the political majority. As indicated in the title of the agreement, it was agreed by a broad majority of the political parties in the Danish Parliament - Social Democratic Party (Socialdemokratiet) (the ruling party at the time), as well as the parties Liberal Party (Venstre), Social Liberal Party (Radikale Venstre), Socialist People's Party (Socialistisk Folkeparti) and The Conservative People's Party (Det Konservative Folkeparti). At the time of the agreement, these parties represented 130 out of 179 seats in the Danish Parliament.

The Council Implementing Decision states that the political agreement should be signed. In accordance with Danish parliamentary procedures, political agreements are not signed. They are agreements amongst legislative coalitions obliging the parties to vote in favour of the agreed law or legislative package in Folketinget and give all parties in the conciliation community a veto right in relationship to amendments to the consensual legislation. Nonetheless, the agreement of the political parties is evidenced by the publication of the document and the presence of the respective parties on the first page of the agreement. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

Furthermore, in line with the description of the measure, the investment window is expected to boost the companies' growth potential and job creation, while encouraging companies to invest in new hardware and technology that can reduce emissions in the longer run. The investment window is a two-year tax rebate on business investment and implies a tax subsidy (since 116% of an investment can be depreciated), which creates an incentive for additional investment. The investment window is indicated on page 4, fifth paragraph of the political agreement. Furthermore, the announced subsequent increase in energy taxation creates an incentive for business investment in technologies to reduce such emissions.

Furthermore, in line with the description of the measure, the tax reform shall consist of temporarily increased tax deduction for companies investing in productive capacity such as technology and software that may help increasing business operations and at the same time reduce greenhouse gas emissions. This is achieved through an investment window implying a tax rebate (since 116% of an investment can be depreciated), which creates an incentive for additional investment. Furthermore, the announced subsequent increase in energy taxation and later of emission taxation creates an incentive for business investment in technologies to reduce such emissions.

Furthermore, in line with the description of the measure, the investment window should not include machinery running on fossil fuels to ensure a green transition of industry and ensure compliance with the "Do No Significant Harm" principle. Page 4 of the draft law (fifth paragraph) excludes fossil fuel

driven machinery. In case of investments when there is no real green alternative, RRF funding will not apply but national funds could, as explained in the summary document. To that end, page 114 of the national Danish Recovery and Resilience Plan included a safety margin of 6.5% between the estimated tax revenue shortfall and the costing estimate (last paragraph) to ensure full compliance with this condition. This safety margin is calculated as the upper bound of the range of observed annual shares of business investments in fossil fuel driven vehicles other than cars in total business investments over the 2008-2017 period. Additionally, two elements are provided by authorities re-assuring on the effective exclusion of any fossil fuel vehicles: (i) confirmation that the structure of demand for the tax scheme has not changed significantly, thus the safety margin of national funding is currently higher that the period average (4.8%); and (ii) confirmation that the subsequent target (T33) can be achieved in full alignment with fossil-fuel exclusion as compliant selection will be carried out by Danish authorities. The acquisition of new technology through investments benefitting from the economic incentives of the investment window can be expected to provide positive climate and environmental effects, due to generally cleaner technology of modern equipment, including lower energy consumption and stronger environmental requirements for such technology. This is expected to lead to lower emission of greenhouse gasses, due to the generally lower energy consumption of new technology and the stricter environmental standards of new technology.

The relevant legislative procedures in the Parliament have been launched.

The legislative proposal amending the Tax Code (Lovforslag nr. L 178) was published on 24 February 2021 in Retsinformation.dk. The proposal contains the investment window, with the same elements as in the political agreement, as per §1, third indent. This legislative proposal amending the Tax Code is therefore the appropriate and relevant legislative procedure since it includes the investment window in the Tax Code. Thereby the political agreement on the green tax reform including the investment window has formed the basis for launching the relevant legislative procedures in the Parliament.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number:	32
Number	52

Related Measure: C4.I1. Investment window

Name of the Milestone: The bill on the green tax reform including the investment window is adopted by the Danish parliament and the initiative enters into force.

Qualitative Indicator: The law on the green tax reform including the investment window is adopted and enters into force.

Context:

The measure aims at establishing an investment window for business investment. Investments within this investment window will benefit from a tax rebate, implying an economic incentive for such investments. The measure is part of the green tax reform, of which the investment window is an integral part, to foster economic activity in the short-term leading to reduced greenhouse gas emissions in the longer term.

Milestone 32 consists in the adoption and entry into force of the investment window legislation. Milestone 32 is the second milestone of the investment, and it follows the completion of milestone 31 related to the signature and publication of a political agreement on the green tax reform, which is also part of the first payment request. It will be followed by target 33, related to 1000 businesses having benefitted from the depreciation rules under the investment window. The investment has a final expected date for implementation in Q2 2024.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. Government Law No 672of 19 April 2021 (L 178 of 19/4/2021 named Act amending the Depreciation Act, the Tax Assessment Act, the Pension Return Tax Act and the Sulphur Tax Act (Lov om ændring af afskrivningsloven, ligningsloven, pensionsafkastbeskatningsloven lov om afgift af svovl) published in the Danish official online Journal Retsinformation.dk. The link can be found here: <u>https://www.retsinformation.dk/eli/ft/202013L00178</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The bill has been adopted by the Danish Parliament and entered into force in April 2021.

The law on the green tax reform (2020-21 L 178) was adopted by the Danish Parliament on 19 April 2021. §5, third indent of the law indicates that the provisions of the law with respect to the investment window took effect as of 23 November 2020. §5, first indent, indicates that the law entered into force on 21 April, the day after its publication on 20 April 2021.

§1, third indent, includes a new provision to be inserted in §5 D of the Danish law on depreciation (*Afskrivningsloven*, LBK nr. 1147, of 29 August 2016). §5 D, first indent, contains a reference indicating that the taxpayer may choose to write off expenses for the acquisition of new operating assets, which are used exclusively for business purposes, on a separate balance, where the acquisition sum is stipulated at 116 per cent. The acquisition of new technology through investments benefitting from the economic incentives of the investment window can be expected to provide positive climate and environmental effects, due to generally cleaner technology of modern equipment, including lower energy consumption and stronger environmental requirements for such technology. This is expected to lead to lower emission of greenhouse gasses, due to the generally lower energy consumption of new technology and the stricter environmental standards of new technology.

The investment window is effective as from 23 November 2020.

§5, fourth indent of the law 2020/I LSV 178, indicates that the investment window is effective as from 23 November 2020. The temporary increase from 100% to 116% of tax depreciation ends ultimo 2022 as per §1 in the law.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 34	Related Measure: C.4 I2. Green tax reform – accelerated dep	reciation		
Name of the Milestone: A political agreement on an accelerated depreciation has been adopted by				
the Danish Parliament and the relevant legislative procedures in the Parliament have been launched				
Qualitative Indicator: The political agreement on the green tax reform including				
the accelerated depreciation is signed and published on the Ministry of Time: Q4 2020				
Taxation's webpage.				
Context:				
The measure aims	to establish an accelerated depreciation for business invest	stment. Investments		

The measure aims to establish an accelerated depreciation for business investment. Investments within this accelerated depreciation will benefit from immediate (as opposed to four yearlong)

depreciation, implying an economic incentive for such investments. It is the objective of the green tax reform, of which the accelerated depreciation is an integral part, to foster economic activity in the short-term leading to reduced greenhouse gas emissions in the longer term.

Milestone 34 requires the Danish Parliament to adopt a political agreement on an accelerated depreciation and to launch the relevant legislative procedure. The political agreement constitutes a political commitment for the concerned political parties to support a given political initiative. On this basis the legislative procedures are launched.

Milestone 34 is the first step of the implementation of the investment, and it will be followed by milestone 35 and target 36, related to the adoption of the legislation and its entering into force and to 1 000 companies having used the tax deduction provided by the accelerated depreciation, respectively. The investment has a final expected date for implementation in Q2 2024.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including the constitutive elements) was satisfactorily fulfilled.
- Political agreement on green tax reform of 8 December 2020 (Aftale om Grøn skattereform) and link, as published on 8 December 2020 on the website of the Ministry of Taxation. Link: <u>https://www.skm.dk/aktuelt/presse-nyheder/pressemeddelelser/bred-aftale-skattereform-kickstarter-groen-omstilling/</u>
- The Ministry of Taxation links to the agreement from the initial publication on the Ministry of Finance website: <u>https://fm.dk/nyheder/nyhedsarkiv/2020/december/bred-aftale-om-groen-skattereform-baner-vej-for-groen-omstilling-i-erhvervslivet/</u>

The authorities also provided:

i. The legislative proposal on the green tax reform (Draft Law No. L 178, Proposal to Act amending the Depreciation Act, the Tax Assessment Act; the Pension Return Tax Act and the Sulphur Tax Act) amending the Tax Code, (Lovforslag nr L 178) (Forslag til Lov om ændring af afskrivningsloven, ligningsloven, pensionsafkastbeskatningsloven og lov om afgift af svovl), published on 24 February 2021 in the online Danish Official Journal Retsinformation.dk. The link can be found: <u>https://www.retsinformaton.dk/eli/ft/202012L00178</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

A majority of the Danish Parliament has entered an agreement on the green tax reform including the accelerated depreciation.

On 8 December 2020 a political agreement on the green tax reform was reached. On page 4, paragraph 5, fifth point of the political agreement, it is stipulated that the agreement includes an accelerated depreciation element. The political agreement was reached by a broad majority in the Danish Parliament, thereby ensuring that the agreement should hold also in case of a change in the political majority. As indicated in the title of the agreement, it was agreed by a broad majority of the political parties in the Danish Parliament - Social Democratic Party (*Socialdemokratiet*) (the ruling party at the time), as well as the parties Liberal Party (*Venstre*), Social Liberal Party (*Radikale Venstre*), Socialist People's Party (*Socialistisk Folkeparti*) and The Conservative People's Party (*Det Konservative Folkeparti*). At the time of the agreement these parties represented 130 out of 179 seats in the Danish Parliament.

The Council Implementing Decision states that the political agreement should be signed. In accordance with Danish parliamentary procedures, political agreements are not signed. They are agreements

amongst legislative coalitions obliging the parties to vote in favour of the agreed law or legislative package in Folketinget and give all parties in the coalition community a veto right in relationship to amendments to the consensual legislation. Nonetheless, the agreement of the political parties is evidenced by the publication of the document and the presence of the respective parties on the first page of the agreement. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled. The qualitative indicator of the milestone requires that the agreement is signed and published on the Ministry of Taxation webpage.

Furthermore, in line with the description of the measure, the initiative shall deliver on the recommendations to Denmark in the National Energy and Climate Plan to frontload investments in a green and digital transition, and by ensuring a just transition for the most affected companies with the implementation of a green tax reform. The initiative delivers on the recommendations in the National Energy and Climate Plan to frontload investments supporting the green and digital transition through creating an economic incentive for business investments with immediate full depreciation as opposed to the general rule of depreciation over four years (page four, fifth paragraph, fifth bullet point of the political agreement). Furthermore, the initiative contributes to ensuring a just transition for the most affected companies by alleviating the financial burden of investments as the ceiling for benefitting from immediate full depreciation is raised from DKK 14 100 to DKK 30 000 (the lower financial burden in terms of tax expenditures is presented on page five, third paragraph of the political agreement).

Furthermore, in line with the description of the measure, an increase in the threshold is expected to work as a short-term stimulus initiative, as it generates additional liquidity for firms in the initial years (where all investments below DKK 30 000 are depreciated at 100 per cent) but the stimulating effect declines over time as future depreciations are reduced to zero.

Furthermore, in line with the description of the measure, after 31 December 2025, the increased limit may result in fiscal losses for Denmark. These losses shall be covered by reducing the overall budget for fiscal expenditures. After the end of the investment in the Recovery and Resilience Plan, the accelerated depreciation is likely to imply a permanent loss of tax revenue for Denmark, as the total value of business investments benefitting from immediate deprecation as opposed to depreciation over four years will be permanently higher. These losses are reflected in page six, table one, of the legislative proposal amending the Tax Code (*Lovforslag nr. L 178*), which refers to a "permanent" tax expenditures of 70 million DKK annually after 2025. The coverage of those losses after 2025 will be ensured by the Danish authorities, outside of the scope of the Recovery and Resilience Plan.

Furthermore, in line with the description of the measure, an increase in the threshold is expected to strengthen the incentive to invest in information and communications technology and is expected to help strengthen liquidity among companies that earn profits. Investment in information and communications technology is facilitated by the increase in the ceiling for immediate deprecation from previously DKK 14 100 to DKK 30 000. The initiative constitutes an economic incentive since the benefit from tax deduction can be achieved immediately rather than over four years.

The relevant legislative procedures in the Parliament have been launched.

The legislative proposal amending the Tax Code (*Lovforslag nr. L 178*) was published on 24 February 2021 in Retsinformation.dk. The proposal contains the accelerated depreciation, with the same elements as the political agreement as per §1 fourth indent. This legislative proposal amending the Tax Code is therefore the appropriate and relevant legislative procedure since it includes the accelerated depreciation in the Tax Code. Thereby the political agreement on the green tax reform including the accelerated depreciation has formed the basis for launching the relevant legislative procedures in the Parliament.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 35	Related Measure: C4.I2. Accelerated depreciation
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Name of the Milestone: The bill on the green tax reform including the accelerated depreciation is adopted by the Danish parliament and the initiative enters into force

Qualitative Indicator: The law on the green tax reform including the accelerated Time: Q2 2021 depreciation is adopted and enters into force.

Context:

The measure aims to establish an accelerated depreciation for business investment. Investments within this accelerated depreciation will benefit from immediate (as opposed to four yearlong) depreciation, implying an economic incentive for such investments. It is the objective of the green tax reform, of which the accelerated depreciation is an integral part, to foster economic activity in the short-term leading to reduced greenhouse gas emissions in the longer term.

Milestone 35 requires the Danish Parliament to adopt the bill on the green tax reform including the accelerated depreciation and for the law to enter into force.

Milestone 35 is the second step of the implementation of the investment. It is preceded by milestone 34 requiring the Danish Parliament to reach a political agreement on the green tax reform, including the accelerated depreciation and the start of the legislative process. Milestone 35 will be followed by target 36, requiring 1 000 companies having used the tax deduction provided by the accelerated depreciation has a final expected date for implementation in Q2 2024.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including the constitutive elements) was satisfactorily fulfilled.
- ii. Government Law No 672 of 13 April 2021 (L 178 of 19/4/2021 named Act amending the Depreciation Act, the Tax Assessment Act, the Pension Return Tax Act and the Sulphur Tax Act (Lov om ændring af afskrivningsloven, ligningsloven, pensionsafkastbeskatningsloven og lov om afgift af svovl)) published in the Danish official online Journal Retsinformation.dk. The link can be found here: https://www.retsinformation.dk/eli/ft/202013L00178.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The Danish parliament shall adopt in April 2021 the bill on the green tax reform, including the accelerated depreciation.

The law on the green tax reform, L178 2020-21 was adopted by the Danish Parliament on 19 April 2021. §5, third indent of the law indicates that the provisions of the law with respect to the accelerated depreciation took effect as of 23 November 2020 (§5, third indent). As per §5, first indent, indicates that the law itself entered into force on 21 April, the day after its publication on 20 April 2021.

The accelerated depreciation shall be applicable to assets purchased on or after 23 November 2020.

§5 third indent of the law on the green tax reform (L178 2020-21) indicates that the provisions of the law with respect to the accelerated depreciation took (retroactively) effect as of 23 November 2020. §1 section three fourth point stipulates that the law includes an accelerated depreciation element. Immediate depreciation implies that businesses undertaking investments with a value of up to DKK 30 000 can write these investments off immediately rather than over four years, as per the normal rules for tax depreciation of business investments. This constitutes that the maximum ceiling for the 100% immediate tax depreciation is raised to DKK 30 000.

The change in the maximum ceiling for 100% immediate tax depreciation consists in a permanent increase in the ceiling for immediate full tax depreciation to DKK 26 300 from previously DKK 12 700. The difference in the amount for the ceiling between the political agreement of 8 December 2020 (DKK 30 000) and the law on the green tax reform (DKK 26 200) is due to the political agreement being

expressed in 2020 price levels (as the political agreement was reached in 2020) while the legislation, in accordance with normal Danish legislative praxis, is expressed in 2010 price levels (see page 2 and footnote 1 of the summary document).

The Depreciation Act, the Tax Assessment Act, the Pension Return Tax Act and the Sulphur Tax Act are existing laws being amended by the new law. The existing laws are expressed in 2010 prices, hence the law amending the existing legislation is currently normally expressed in 2010 prices.

Commission Preliminary Assessment: Satisfactorily fulfilled

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Num	ber:	38

Related Measure: C4.R2 Emission taxes on industries

Name of the Milestone: A political agreement on an increase in the emissions tax on industry has been adopted by the Danish parliament.

Qualitative Indicator: The political agreement on the green tax reform including the increased emissions tax on industry is signed and published on the Time: Q4 2021 Ministry of Taxation's webpage.

Context:

The objective of this measure is to increase the emissions tax in Denmark for all industries equally, as part of the wider green tax reform (component 4 of the Danish Recovery and Resilience Plan), in order to provide cost efficient reductions in greenhouse gases emissions. To this end, this measure increases the process energy tax on fossil fuels for industry by DKK 6/GJ, corresponding to approximately 100 DKK/ton CO2.

Milestone 38 consists of a political agreement on an increase in the emissions tax on industry adopted by a majority of the Danish parliament.

Milestone 38 is the first step of the implementation of this reform. It will be followed by milestones 39 and 40, which consist of the adoption of the bill for green tax reform excluding agriculture and mineral process and its entry into force for all industries, respectively. The reform has a final expected date for implementation in Q1 2025.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including the constitutive elements) was satisfactorily fulfilled.
- ii. Political agreement on green tax reform, as published on 8 December 2020 on the website of the Ministry of Taxation. Link: <u>https://www.skm.dk/aktuelt/pressenyheder/pressemeddelelser/bred-aftale-skattereform-kickstarter-groen-omstilling/</u> The Ministry of Taxation links to the agreement from the initial publication of in the Ministry of Finance website: <u>https://fm.dk/nyheder/nyhedsarkiv/2020/december/bred-aftale-omgroen-skattereform-baner-vej-for-groen-omstilling-i-erhvervslivet/</u>

The authorities also provided:

i. The legislative proposal on the increase of the energy tax on fossil fuels for businesses, Draft Law No. L 8 – 2022-2023 (1st session): Proposal for an Act amending the Act on the taxation of natural gas and city gas, etc., the Act on the taxation of hard coal, lignite and coke, etc., the Act on the energy tax on petroleum products, etc., the Act on the taxation of pesticides and various other acts (*L* 8 – 2022-2023 (1. Samling): Forslag til lov om ændring af lov om afgift af naturgas og bygas m.v., lov om afgift af stenkul, brunkul og koks m.v., lov om energiafgift af mineralolieprodukter m.v., lov om afgift af bekæmpelsesmidler og forskellige andre love), as presented to the Danish Parliament (Folketing) on 5 October 2022 and published on the

Danish Parliament (*Folketing*) website: https://www.ft.dk/samling/20221/lovforslag/L8/som_fremsat.htm#

ii. The legislative proposal on the increase of the energy tax on fossil fuels for businesses, Draft Law No L 15 – 2022-2023 (2nd session): Proposal for an Act amending the Act on the taxation of natural gas and city gas, etc., the Act on the taxation of hard coal, lignite and coke, etc., the Act on the energy tax on petroleum products, etc., the Act on the taxation of pesticides and various other acts (Lovforslag No L 15 – 2022-2023 (2. Samling) Forslag til lov om ændring af lov om afgift af naturgas og bygas m.v., lov om afgift af stenkul, brunkul og koks m.v., lov om energiafgift af mineralolieprodukter m.v., lov om afgift af bekæmpelsesmidler og forskellige andre love), as presented to the Danish Parliament (Folketing) on 25 January 2023 and published on the Danish Parliament (Folketing) website:

https://www.ft.dk/samling/20222/lovforslag/L15/som_fremsat.htm

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

A majority of the Danish Parliament has entered an agreement on the green tax reform.

On 8 December 2020 a political agreement on the green tax reform was reached. The political agreement on the green tax reform, including the increase in the emissions tax, has been reached by a broad majority in the Danish Parliament, thereby ensuring that the agreement should hold also in case of a change in the political majority. As indicated in the title of the agreement, it was agreed by a broad majority of the political parties in the Danish Parliament - Social Democratic Party (*Socialdemokratiet*) (the ruling party at the time), as well as the parties Liberal Party (*Venstre*), Social Liberal Party (*Radikale Venstre*), Socialist People's Party (*Socialistisk Folkeparti*) and The Conservative People's Party (*Det Konservative Folkeparti*). At the time of the agreement, these parties represented 130 out of 179 seats in the Danish Parliament.

The Council Implementing Decision states that the political agreement should be signed. In accordance with Danish parliamentary procedures, political agreements are not signed. They are agreements amongst legislative coalitions obliging the parties to vote in favour of the agreed law or legislative package in Folketing and give all parties in the conciliation community a veto right in relationship to amendments to the consensual legislation. Nonetheless, the agreement of the political parties is evidenced by the publication of the document and the presence of the respective parties on the first page of the agreement. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled. The qualitative indicator of the milestone also requires that the agreement is published on the Ministry of Taxation webpage. The Ministry of Taxation on its website links to the political agreement as published on the website of the Ministry of Finance.

The agreement on the green tax reform includes the increased emissions tax on industry.

Page 2 of the political agreement of 8 December 2020 on the green tax reform sets out the increase in the process energy tax on fossil fuels for industry. The political agreement states that the Government and the parties to the agreement agree to increase the energy tax on fossil fuels for businesses by DKK 6 per GJ. Furthermore, in line with the description of the measure, the measure shall raise the fossil energy taxation for all industries equally. As described in paragraphs 5 and 6 on page 2 of the Political agreement, the tax reform aims to introduce a higher and more uniform tax on CO2 emissions. By 2025, the same increase in the energy tax for businesses would be phased in for all industries, including mineralogical processes and agriculture.

The relevant legislative procedures in the Parliament have been launched.

As described on page 6 of the political agreement, it has been reached by a majority of the Danish parliament, with the obligation for the parties to vote for law proposals and the legal basis for the financing necessary to implement the agreement. The legislative proposal No L 8 – 2022-2023 (1st

session), which concerns the increase of the energy tax on fossil fuels for businesses following the political agreement on the green tax reform on 8 December 2020, was presented to the Danish Parliament on 5 October 2022 by the Ministry of Taxation. Due to the early elections announced on the same day, the discussions on the legislative proposal were postponed and the proposal lapsed. Following the formation of a new government on 13 December 2022, the legislative proposal was reintroduced. The legislative proposal No L 15 – 2022-2023 (2^{nd} session), which concerns the increase of the energy tax on fossil fuels for businesses following the political agreement on the green tax reform of 8 December 2020, was presented to the Danish Parliament on 25 January 2023 by the Ministry of Taxation. On this basis, the relevant procedures in the Parliament can be considered launched.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 41	Related Measure: C5.R1 Re-prioritisation of the registration tax of vehicles and
	low electricity tax on charging electric vehicles

Name of the Milestone: Entry into force of legal act to re-prioritise the registration tax of vehicles and low electricity tax on charging electric vehicles

Qualitative Indicator: The legal act enters into force

Time: Q1 2021

Context:

The measure aims to incentivise more consumers to choose zero and low-emission cars. The tax on electricity for zero and low-emission vehicles shall be lowered. The reform is part of a set of measures related to lowering registration tax for low emission vehicles and scrappage schemes for diesel cars.

Milestone 41 concerns the entry into force of the legal act to reduce the registration tax for lowand zero-emission cars, simplify the registration tax to make it dependent only on the car's value and CO2 emissions, and extend the special scheme with low electricity tax to charge electric cars Milestone 41 is the first step of the implementation of the reform. It will be followed by target 43, related to the number of zero- and low emission cars in the Danish car stock. The reform has a final expected date for implementation in Q4 2025.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. Legislative Act No. 203 of 13 February 2021 (LOV nr. 203 af 13/02/2021) Act amending the Registration Tax Act (LOV nr. 228 af 11/03/2020), the Fuel Consumption Tax Act, the Tax Assessment Act and various other Acts (Lov om ændring af registreringsafgiftsloven, brændstofforbrugsafgiftsloven, ligningsloven og forskellige andre love). The legislative act was published in the Danish official online Journal Retsinformation.dk. The link can be found here: <u>https://www.retsinformation.dk/eli/lta/2021/203</u>

Analysis:

The Commission considers that there is a clerical error in the text of the Council Implementing Decision Annex as regards the description of this measure in reference to the sentence "This first subset of measures shall also include a premium for scrapping old diesel cars in order to ensure that older cars are rapidly changed into new and less polluting cars". Such description should have been included further up on the same page of the Council Implementing Decision Annex, namely at the end of paragraph 3 on page 32, in the text related to the description of the overall component. The

erroneous nature of the current positioning of this sentence is evident from its reference to "this sub-set of measures", as the single measure at hand ('Reform 1') does not constitute a 'subset of measures'; the true subset is defined in paragraph 2 and 3 on page 32 of the Council Implementing Decision Annex and includes both reform 1 and investment 1 of component 5. As further evidence, pages 139 and 141 of the national Recovery and Resilience Plan submitted by Denmark clearly makes the difference between these two measures. As explained above, the complementary requirement of investment 1 is relevant only for milestone 42, which specifically relates to the scrapping scheme for diesel cars, due for the second payment request, and therefore will not be checked under milestone 41.

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The milestone shall be reached when the legal act to reduce the registration tax for low- and zeroemission cars:

First, section 5b of the amended legislative act No. 228 describes the changes made to the registration tax **for zero-emissions** cars. It describes that cars emitting 0 grams CO₂ pr. km will pay a reduced_registration tax. From 18 December 2020 until 31 December 2025, the registration tax will be reduced to 40 per cent of the full tax. After 2025, this share of 40 per cent will increase with eight percentage points each year until 2030, where the registration tax for zero-emissions cars will be reduced to 80 per cent of the full tax. It follows from revised section 5b, paragraph 2, that zero-emissions car receive a deduction in the full tax of 170 000 DKK in 2021, which is gradually reduced until 2030, where it amounts to 137 000 DKK.

Second, the registration tax for low-emissions cars follows from section 5c of the amended legislative act No. 228 and describes that cars that emit more than 0 grams CO_2 pr. km but under 50 g CO_2 pr. km, pay a reduced registration tax. From 18 December 2020 until 31 December 2021, the registration tax will be reduced to 45 per cent of the full tax. The share of 45 per cent will increase each year and until 2030, where it will amount to 80 per cent. It follows from section 5c, paragraph 2, of the amended legislative act No. 228 that low-emissions car receive a deduction in the full tax of 50 000 DKK in 2021, which is gradually reduced until 2030, where it amounts to 35 000 DKK.

Simplify the registration tax to make it dependent only on the car's value and CO2 emissions:

Section 1 of the amended legislative act No. 228 describes the changes made to the registration tax, which entered into force for cars registered after 18 December 2020. Before the amended legislative act entered into force, the registration tax was dependent on the car's value, safety equipment and fuel economy, which in total entailed a more complex tax structure. Section 4 (1) (1) of the amended legislative act No. 228 describes the changes made to the part of the tax that is dependent on the cars value. A new paragraph 2 is introduced and describes that a supplementary charge should now be calculated only based on how many grams of CO2 per km the car emits. While in the past the tax was dependent on the car's value, safety equipment and fuel economy, it is now dependent only on the car's value and CO2 emissions.

Extend the special scheme with low electricity tax to charge electric cars:

Section 8(4) of the amended legislative act No. 228 describes that the current special scheme with low electricity tax on electricity used to charge electric cars is extended until 1 January 2031. Before the entry into force of the Legislative Act No 203, the scheme would have expired on 1 January 2022.

Enters into force:

The legislative act No. 203, amending the Registration Tax Act (LOV nr. 228 af 11/03/2020), the Fuel Consumption Tax Act, the Tax Assessment Act and various other Acts, was adopted by the Danish government on 9 February 2021. It entered into force on 13 February 2021, which corresponds to the date of publication in the Danish Official Gazette (paragraph 1 of section 9). The act was published in Retsinformation. Section 9 paragraph 4 the act No. 203 of 13 February 2021 indicates that certain sections of the act are subject to different dates of entry into force:

- Paragraph 2 indicates the sections and sub-sections that entered into force on 1 June 2021;
- Paragraph 3 indicates the sections and sub-sections that apply to the individual vehicle from the first tax period starting on or after 1 January 2021;
- Paragraph 4 indicates the sections and sub-sections that entered into force on 18 December 2020; subject to paragraphs 9 to 11;
- Paragraph 5 indicates the sections and sub-sections that entered into force as from the 2021 financial year;
- Paragraph 6 indicates the sections and sub-sections that entered into force on 1 July 2021.

Furthermore, in line with the description of the measure, this reform shall be part of the set of measures related to lower registration tax for low emission vehicles and scrappage schemes for diesel cars. The scrappage scheme for diesel cars is a complementary measure to the measure related to lower registration tax. It relates to a different measure and will be fulfilled by a different milestone (milestone 42), due for the second payment request, and therefore will not be assessed under this milestone. Together the two measures (reform 1 and investment 1 of component 5 in the Council Implementing Decision Annex) form the first sub-set of measures of component 5 that are referred to on page 32 of the Council Implementing Decision Annex.

Furthermore, in line with the description of the measure, the tax on electricity for zero and lowemission vehicles shall be lowered. First, section 5b of the amended legislative act No. 228 describes that cars emitting 0 grams CO₂ pr. km will pay a reduced registration tax. From 18 December 2020 until 31 December 2025, the registration tax will be reduced to 40 per cent of the full tax. After 2025, this share of 40 per cent will increase with eight percentage points each year until 2030, where the registration tax for zero-emissions cars will be reduced to 80 per cent of the full tax. It follows from revised section 5b, paragraph 2, that zero-emissions car receive a deduction in the full tax of 170 000 DKK in 2021, which is gradually reduced until 2030, where it amounts to 137 000 DKK.

Second, the registration tax for low-emissions cars follows from section 5c of the amended legislative act No. 228 and describes that cars that emit more than 0 grams CO_2 pr. km but under 50 g CO_2 pr. km, pay a reduced registration tax. From 18 December 2020 until 31 December 2021, the registration tax will be reduced to 45 per cent of the full tax. The share of 45 per cent will increase each year and will in 2030, where it will amount to 80 per cent. It follows from section 5c, paragraph 2, of the amended legislative act No. 228 that low-emissions car receive a deduction in the full tax of 50 000 DKK in 2021, which is gradually reduced until 2030, where it amounts to 35 000 DKK.

Against this background, the justification and substantiating evidence provided by the Danish authorities cover all constitutive elements of the milestone.

Commission Preliminary Assessment: Satisfactorily fulfilled

Related Measure: C5.I2 Development test of road-pricing

Name of the Milestone: Political agreement has been adopted by the government and a majority of the parliament on the conduction of the test scheme

Qualitative Indicator: Agreement reached between the government and a majority of the parliament on the conduction of the test scheme.

Context:

The measure on the development test of road pricing aims to provide an overall evaluation of roadpricing options, understood as the application of vehicle-based tolls, both in terms of technology, system costs, practicability, user behaviour and user under-standing of the system, as well as socioeconomic and distributional effects. The project management and dissemination of results is expected to be assigned to a university with scientific knowledge in the area of transport economics. This investment is part of a series of studies and tests will be executed in order to accelerate the decarbonisation of roads (promotion of car-pooling, test-scheme for heavy haulage transportation, optimization of road pricing).

Milestone 44 concerns the political agreement to be reached on the description of the test-scheme and the organisation of the test. The objective of the political agreement is to initiate development tests of road pricing in order to explore efficient ways of taxing congestion and the damage and health costs associated with driving.

Milestone 44 is the first step of the implementation of the investment. It will be followed by milestone 45, related to the publication of the results of the test. The investment has a final expected date for finalisation in Q1 2024.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. **Political agreement on Green transition of road transport** of 4 December 2020 between the Government, Social Liberal Party; the Socialist People's Party and the Unity Party, on the conduction of the road pricing test scheme (*Aftale mellem regeringen, Radikale Venstre, Socialistisk Folkeparti og Enhedslisten om: Grøn omstilling af vejtransporten*), with a majority of 91 votes out of 179. Link to the website of the Danish Ministry of Finance where the agreement is published: <u>https://fm.dk/nyheder/nyhedsarkiv/2020/december/groen-vejtransportaftale-massiv-co2-reduktion-og-ambition-om-1-mio-groenne-biler-i-2030/</u>

The authorities also provided:

- i. Letter of approval of 1 July 2022 concerning the project "test development of road pricing for passenger cars" for road pricing test scheme specifying how the test will be administered (*Bevillingsskrivelse vedr. projektet "Udvik-lingsforsøg med roadpricing for personbiler"*). The letter was issued on 1 July 2022 by the Ministry of Transport and addressed to "*Danmarks Tekniske Universitet"* (DTU).
- ii. A document including **the Description and organization for road pricing test scheme** of 1 July 2022 drafted by Danish Technical University (DTU) "*Danmarks Tekniske Universitet*" in cooperation with "*Sund og baelt*" (SB).

Analysis:

The Council Implementing Decision states that a "political agreement shall be reached on the description of the test-scheme and the organisation of the test. In this regard, the objective of the

agreement shall be to initiate development tests of road pricing in order to explore efficient ways of taxing congestion and the damage and health costs associated with driving. No further legal basis shall be needed to initiate the test scheme." The political agreement on Green transition of road transport was adopted by the government and the parliament, with a majority of 91 votes out of 179 on 4 December 2020. On the basis of this agreement, the Danish Technical University (DTU) drafted a technical document including the 'Description and organization for road pricing test scheme', which sets forth the requirements from the Council Implementing Decision. The political agreement of 4 December 2020 only established that the scheme shall take the form of a publicprivate cooperation, without including any specifications regarding the description of the testscheme nor the organisation of the test. To this end, the technical document drafted on the basis of the political agreement establishes that the scheme shall take the form of a public-private cooperation and describes the test-scheme and the organisation of the test, in line with the requirements of the Council Implementing Decision. Thus, the content of the technical document on the 'Description and organization for road pricing test scheme' is evidence that the political agreement was followed in drafting the technical document. Additionally, the letter of approval of 1 July 2022 concerning the project "test development of road pricing for passenger cars" demonstrates that the project has started and that the Government, the Social Liberal Party, the Socialist People's Party and the Unity Party have not objected to the implementation of the political agreement through this project and on the basis of the technical document developed by the Danish Technical University. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

The political agreement shall be reached on the description of the test-scheme.

The Council Implementing Decision required that the political agreement shall be reached on the description of the test-scheme.

As indicated in the title of the agreement, the Agreement was agreed by a broad majority of the political parties in the Danish Parliament - Social Democratic Party (Socialdemokratiet) (the ruling party at the time), as well as the parties, Social Liberal Party (Radikale Venstre), Socialist People's Party (Socialistisk Folkeparti) and the Unity Party (Enhedslisten). At the time of the agreement, these parties represented 91 out of 179 seats in the Danish Parliament. The Agreement reached is formalised by its publication that took place on 4 December 2020 (https://fm.dk/nyheder/nyhedsarkiv/2020/december/groen-vejtransportaftale-massiv-co2reduktion-og-ambition-om-1-mio-groenne-biler-i-2030/)

The Agreement of 4 December 2020 describes that it is the government and the supporting parties behind the political agreement's intention to introduce a road pricing system based on tolls for passenger cars (page 6). This Agreement describes that the test-scheme shall consist in assessing the administrative challenges associated with taxing congestion and the damage and health costs associated with driving, and that the scheme would take the form of a public-private development cooperation to assess these challenges.

Agreement reached between the government and a majority of the parliament on the organisation of the test

Pages 6-18 of the 'Description and organization for road pricing test scheme' provides information on the organisation contemplated for the test. Page 9 refers that the organization will take the form of a cooperation between the public and private sector. Secondly, the letter of approval of 1 July 2022 for road pricing test scheme shows that the tests will be administrated by "*Danmarks Tekniske Universitet*" (DTU), a Danish university with experience in transport economics, in cooperation with "*Sund og baelt*" (SB), a state-owned company with experience in transport links. Thirdly, page 1 of the 'Description and organization for road pricing test scheme', under section 'Purpose and principles of the development study' explains that a representative group of test subjects (approximately 2 000 - 2 500) will be chosen to conduct testing periods, where the movement of their car is tracked. During test periods the test person will be acting based on different driving centred fee structures. Each test subject will test two different fee structures during the time of the experiment. Fourthly, page 16 of the 'Description and organization for road pricing test scheme', under section 'Project team and organisation', also mentions that the test scheme will be performed by DTU and SB. DTU will be responsible for the analytical parts of the test scheme while SB will hold responsibility for design and actualisation of the project. The project is monitored by an external party in the form of *Mogens Fosgerau* from Copenhagen University, the leading professor in the field of transport economics (page 17). Finally, as page 17 of the 'Description and organization for road pricing test scheme' describes, the project will be followed by a follow up group made up of public servants and a follow up group consisting of the government and the parties behind the political agreement.

The objective of the agreement shall be to initiate development tests of road pricing in order to explore efficient ways of taxing congestion.

Page 1 of the 'Description and organization for road pricing test scheme', describes that the purpose of the road price test scheme is to evaluate the option of using road pricing in regard to the most appropriate tolling technologies, their associated costs and their feasibility. The scheme is to also analyse user behaviours based on how roads are priced. Page 1 further specifies that during test periods the test persons will be acting based on different driving fee structures. Each test person will test two different fee structures during the time of the experiment.

The objective of the agreement shall be to initiate development tests of road pricing in order to explore the damage and health costs associated with driving.

Page 1 of the 'Description and organization for road pricing test scheme' document describes that the purpose of the scheme is to evaluate road pricing options in regard to user behaviour, evaluate their welfare economic impact and distributional effects. The document explains that test seeks to address the health risks of congestion, which are predominant in urban areas. Therefore, the test is to be geographically focused on one or more larger urban areas. The scheme will also allow analysing the economic impact of road pricing on welfare, as well as its distributional effects on individual wealth. For instance, the scheme intends to provide indications on how the introduction of a congestion taxation will impact house prices, in particular in the most congested areas (page 15).

No further legal basis shall be needed to initiate the test scheme.

The political agreement of 4 December 2020 is an agreement involving the government and political parties represented in the Danish parliament. The Political agreement does not indicate that further legislation is necessary to initiate the test scheme. The accompanying evidence provided, 'letter of approval' and 'Description and organization for road pricing test scheme', exclusively refer to the political agreement as the only legal basis for implementing the scheme.

Furthermore, in line with the description of the measure, this investment is part of a series of studies and tests that shall be executed in order to accelerate the decarbonisation of roads. The measure intends to contribute to the acceleration of the decarbonisation of roads as indicated on page 2 of the 'Description and organization for road pricing test scheme' document. The measure 'Development test of road-pricing' consists in analysing options aiming at optimising road pricing. For instance, page 1 of the 'Description and organization for road pricing test scheme' mentions that the purpose of the road price test scheme is to evaluate the most appropriate tolling technologies and their associated costs and feasibility. The measure 'Development test of road-pricing' is also part of a political agreement which includes a series of complementary measures also contributing to the decarbonisation of roads. Some of those measures are addressed by other milestones of the Danish plan. It is in particular the case of an 'analysis of pilot double-trailers scheme' (page 5 of the political agreement) that consists in a test-scheme for heavy haulage transportation (measure C5.14), an 'analysis of optimisation and adaptation of national weight and size regulation' (measure C5.I5) (page 5 of the political agreement), 'car sharing and pooling' (measure C5.I3) (page 5 of the political agreement).

Furthermore, in line with the description of the measure, the project management and dissemination of results is expected to be assigned to a university with scientific knowledge in the area of transport economics. The 'Letter of approval' of 1 July 2022' specifies that the tests will be managed by "Danmarks Tekniske Universitet" (DTU), a Danish university with experience in transport economics, in cooperation with "Sund og baelt" (SB), a state-owned company with experience in transport links. The 'Letter of approval' describes that the dissemination of the results by DTU will be warranted by a professional report communicated to stakeholders on a semi-annual basis, and by the submission of a comprehensive technical report and a final project account to the Ministry of Transport, within three months of the closure of the project. The 'Description and organization for road-pricing' describes that the expertise of DTU is warranted by the DTU project team (page 16), composed of professor Otto Anker Nielsen and Deputy Head of Senior Science Ninette Pile-gaard, who both have long experience in analysing road charges and regulating transport, as well as in evaluating transport projects. Professor Otto Anker Nielsen and Senior researcher Ninette Pile-gaard were both members of the Commission for the Green Transition of passenger cars, and Mr. Nielsen has also been a member of, inter alia, the Train Electricity Commission, the Transport Expert Group of the Minister for Transport for the Future of Transport, and was project manager for DTU's part of the former Akta experiment in Copenhagen (Alternative Driv-ing and Taxes).

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 46	Related Measure: C5.I5. Analysis of the regulation on weight and dimensions to
	optimise heavy haulage.

Name of the Milestone: Publication of a report on the analysis of the national regulation on weight and dimensions

Qualitative Indicator: Publication of report on analysis of the	
national regulation and on weight and dimensions, which is	Time: Q4 2021
expected to help quantifying potential reductions in emissions.	

Context:

The objective of the measure is to provide an analysis of the potential of lower emissions through further adjustments of the current regulation on weight and dimension. Besides estimating the potential reduction in emissions, the analysis will estimate financial consequences for the transport sector and the society - such as increased wear and tear on roads.

Milestone 46 requires the publishing of a report with an analysis of the current national regulation on weight and dimensions. This analysis shall result in a final report with recommendations, including proposals for amendments to the national regulation with estimated climate effects, description of traffic safety conditions and costs. The proposed actions must be compliant with the 'Do No Significant Harm' requirement. Milestone 46 is the only milestone of this investment.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.

 The report of 31 December 2021 on optimization and adaptation of the regulation on weight and dimensions regarding heavy haulage, including annexes ('Analyse af optimering og tilpasning af national vaegt – og dimensionregulering') prepared by COWI Denmark, a consultancy, published on the website of the Danish Road Traffic Authority. Link to the publication: <u>https://fstyr.dk/da/-/media/FSTYR-lister/Publikationer/COWI-Analyse-af-optimering-og-tilpasning-af-national-v%C3%A6gt--og-dimensioneringsregulering.pdf</u>

The authorities also provided:

i. **'Do No Significant Harm' checklist** provided by the Danish Ministry of Transport dated 9 November 2022.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

An analysis regarding the current national regulation on weight and dimensions is published:

Pages 53-59 of the report on optimization (meaning the design of a road network that would minimise wear and tear costs and risk on safety, while maximising the CO2 emission decrease) and adaptation of the regulation on weight and dimensions regarding heavy haulage provides for an assessment of the 'national weight and dimensions regulation'. In line with the description of the measure, the report provides an analysis concerning the potential of lower emissions through amendments to the current regulation on weight and dimensions. The analysis also includes estimates the financial consequences for the transport sector and the society - such as increased wear and tear on roads.

The analysis includes 24 initiatives, which entail amendments to the existing framework, including national regulation, on the weight and dimensions of heavy-duty vehicles. These initiatives belong to four main categories (an overview is provided on page 61 of the report):

- i. Increased total permissible weight of up to one and two tons for alternatively fuelled and zero-emission vehicles;
- ii. Increased total permissible weight of up to one ton for vehicles with electric equipment installed;
- iii. Increased total permissible weight for rigid vehicles and trailers;
- iv. Increased total permissible vehicle length for vehicles with electric equipment, cranes or alternatively fuelled and zero-emission technologies.

The analysis performed by COWI Denmark regarding the current national regulation on weight and dimensions in Denmark was published on 31 December 2021 on the Danish Road Traffic Authority website.

The analysis shall be based on existing data:

The report of 31 December 2021 on optimization and adjustment of the regulation on weight and dimensions regarding heavy haulage uses different datasets of existing data to support the analysis. This is reflected in the second section, page 24, which references the data from the "land transport model", second section page 25 references the Tema2015 dataset, section 3 page 26 states the WIM dataset and section 8 page 91, includes a reference to the dataset TERESA, used to study the socio-economic consequences of the proposed actions.

The data used that forms the analysis of the report includes number of vehicles subdivided per gross weight, the amount of ton-km, which is the transported amount of goods measured in tonnes multiplied with amount of km per transport. Also, both the parameters which are used to measure and compare the different initiatives (such as road wear and tear for equivalent 10 tonnes axle), which is mostly based on data from Statistics Denmark, and data on road bridges and emission-

factors are set by the Danish Energy Agency, as explained on page 2 of the summary document. This Agency is responsible for tasks linked to energy production, supply and consumption, as well as Danish efforts to reduce carbon emissions. This shows that all the data used in the analysis existed beforehand and no new data has been collected for the analysis.

And including a cost-benefit analysis of the potential emissions reductions and of the potential financial consequences, such as wear and tear on roads:

The report includes a cost-benefit analysis, which provides evidence for reduced emissions for the individual initiatives. The report concludes (pages 10 and 11 of the report) that all initiatives lead to a decrease in emissions, and the largest decrease is found with the initiatives which increases the total permissible vehicle length for vehicles with electric equipment, cranes or alternatively fuelled and zero-emission technologies. The effects on emissions are defined as significant when using zero-emission technologies. The climate and environmental effects are high when transferring to battery operation, such as by installing electric equipment on the vehicle (for example cranes) or switching to zero-emission vehicles. The effects deriving from switching from diesel to zero-emission technologies are due to less emission per kilometre driven. The effects deriving from allowing higher weight (for example with installed electric equipment) are caused by vehicles being able to carry more goods and hence drive fewer kilometres.

The cost benefit analysis in the report also quantifies the potential negative impacts, such as wear and tear (see below), of technical solutions for increasing weight for four categories of vehicles, namely: i) low/zero emission vehicles; ii) for vehicles with electric equipment installed; iii) for rigid vehicle and trailers and, iv) for vehicles with electric equipment, cranes or alternatively fuelled/zero emission vehicles (pages 12-19 and pages 53-90 of the report). The report (on pages 10 and 11) includes findings and recommendations related to socioeconomic benefits of the initiatives, notably when it comes to a) the increase in the weight of the vehicles and the impacts on municipal roads; b) savings for operators due to the greater flexibility and reduction in kilometres travelled if the overall weight limits are increased; c) road safety; d) impacts on bridges; and e) environmental and climate effects.

The report also quantifies the potential financial consequences of the measures on wear and tear on roads (conclusions on page 9 of the report). For instance, across all analysed initiatives, the analysis shows a significant additional wear and tear on roads, expected to happen on smaller municipal roads. The wear and tear are relatively higher when the vehicles are heavier, due to an increasing impact from the weight on the axels.

The cost of the considered measures is offset by their benefits: the report explains that there are relatively lower impacts for vehicles when the number of axels is increased. In addition, the costly risk of breaching weight restrictions for bridges is found to be limited.

Lastly, the analysis explains that operators can save costs from the reduced number of vehicle kilometres necessary to carry the same amount of goods. The reduction in vehicle kilometres will also provide mitigation of some of the road wear and tear for transport companies.

The analysis on national regulation on weight and dimensions shall result in a final report with recommendations, including proposals for amendments to the national regulation with estimated climate effects, description of traffic safety conditions and costs:

Denmark explained (page 2 of the summary document) that the analysis provided is the final report referred to in the Council Implementing Decision annex. The summary document also clarifies that the report provided the Danish Ministry of Transport with an overview of the impact of possible allowance of higher weight and larger heavy-duty vehicles in Denmark, showing both the positive consequences and the negative consequences related to the 24 considered initiatives. Estimated climate effects and road maintenance costs were analysed for each initiative (pages 67-90 of the report), this also occurred with respect to road safety (pages 46 and 47 of the report).

Denmark confirmed that 5 out of the 24 initiatives considered in the report will be used for adapting the existing framework and for amending the national regulation (page 2 of the summary document), including four initiatives regarding longer vehicles. They all integrate the impacts on emissions, wear and tear on road surfaces, bridge carrying capacity limits, road safety (pages 46-47 of the report) and user cost highlighted in the analysis.

Among other, the analysis provided the Ministry and authorities with suggestions to initiate multiple initiatives regarding possible allowance of higher weight and dimensions for heavy-duty vehicles from 2025 in relation to a political agreement on kilometre-based road toll for trucks (page 2 of the summary document).

As a background information, Denmark is considering 11 initiatives, divided in two areas. Seven initiatives regarding increased gross weight of rigid trucks and road trains, and four initiatives regarding longer vehicles, without increasing the allowed total length of the load-space. All 11 initiatives will make it possible to carry more goods per transport, and their implementation is expected to contribute to a reduction in CO2 emissions on approximately 0.1 million tons per year. Out of these 11 initiatives, 5 initiatives originate from the recommendations of the report.

The report shall propose actions that are compliant with the DNSH requirement:

The 'Do No Significant Harm' checklist prepared by the Danish Ministry of Transport shows that the analysed initiatives are compliant with the DNSH requirement included in the Council Implementing Decision Annex, and that the recommendations on how to optimize heavy haulage have been assessed against the DNSH-principle using Annex 1 of the Technical guidance on the application of "Do No Significant Harm" under the Recovery and Resilience Facility Regulation (2021/C 58/01).

In part one of pages 1 and 2 of the DNSH checklist, neither of the six environmental goals of the taxonomy is significantly harmed by the analysed recommendations on how to optimize heavy haulage:

- i. The recommended actions will contribute to climate change mitigation as they will not lead to significant greenhouse gas emissions as more efficient trucks and transports would lead to a decrease in the number of trucks, and thereby lower the emissions per transported tons of goods. The initiatives could in theory in total reduce the CO2-emissions by approximately 1 million tons in a 15-year period.
- ii. The recommended actions will not significantly harm climate change adaptation as the analysed initiatives regarding alternatively fuelled, zero-emission vehicles and electrification of vehicles could disincentive the use of fossil fuel combustion. At the same time, the initiatives do not entail construction of new roads, only higher maintenance cost of the existing.
- iii. The recommended actions will not significantly harm the sustainable use and protection of water and marine resources as the analysed initiatives encourages the usage of sustainable road transport and limits the consumption and usage of polluting and emitting vehicles, thus the initiatives are not expected to have an implication for the good status or the good ecological potential of bodies of water.
- iv. The recommended actions will not significantly harm circular economy, including waste prevention and recycling as they will not lead to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources, or increase the generation, incineration or disposal of waste.
- v. Further, the analysed initiatives will not significantly harm the pollution prevention and control to air, water or land as they will not lead to a significant decrease in emissions of pollutants into air, water or land.
- vi. Lastly, the recommended actions will not significantly harm the protection and restoration of biodiversity and ecosystems since they will not lead to significant harm of the good condition and resilience of ecosystems, or to the conservation status of habitats and species. Pollutants are strictly regulated in Danish environmental laws and their emissions will not

be impacted by the analysed initiatives of optimising the national regulation on weight and dimensions.

Number: 48	Related Measure: C5.I4. Analysis of test scheme with double trailers	
Name of the Milestone: Publication of an analysis on double trailers analysing road safety, vehicle engineering, road engineering and environmental conditions.		
Qualitative Indicator: Publication of a report on the findings of the analysis of test scheme with double trailers.	Time: Q4 2021	
Context: The objective of the measure is to carry out an analysis, by the Danish Road Directorate and the Danish Road Traffic Authority, covering the efficiency of the road design, planning and test rides Based on the analysis it must be possible to decide which reconstructions can be carried out in order to ensure both traffic safety and traffic flow on the certain road network. Milestone 48 covers the analysis on double trailers, which includes the publication of a report with final recommendations, including proposals for a pilot road network and estimate of climate effects road safety conditions and finances, including investments in rebuilding the road network. The Council Implementing Decision includes compliance with 'Do No Significant Harm' as requirement for the actions proposed by the report. Milestone 48 is the only milestone of this investment.		
Evidence provided:		
 In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided: Summary document duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled. The report of 22 December 2021 on the findings of the analysis of test scheme with double trailers ('Analyse af forsogsordning med dobbelttralere (DUO2)') issued by the Danish Road Directorate. It was published on the website of the Danish Ministry of Transport on 22 December 2021. Link to the publication: https://www.trm.dk/nyheder/2021/analyse-afforsoeg-med-ekstra-lange-lastbiler 		
Analysis: The justification and substantiating evid constitutive elements of the milestone.	ence provided by the Danish authorities covers all	
The analysis on double trailers shall result The analysis was published in the form of Danish Ministry of Transport.	in the publication of a report: a report on 22 December 2021 on the website of the	
With final recommendations, including proposals for a pilot road network: Following the political agreement of 4 December 2020 (only referred to on page 7 of the report which explains the context of the analysis, not submitted by Denmark) on the green transition of road transport, Denmark has decided to allocate 1 million DKK to allow the Danish Road Traffic Authority and Danish Road Directorate to carry out an analysis on double trailer in 2021 (page 7 of the report). The objective of the report is to study the possibility to use double-trailers (so-called 'DUO2') on roads in order to reduce CO2 emissions per ton of goods transported.		

Against this background, the purpose of the report is more precisely to identify an experimental or pilot road network and to provide recommendations to maintain road safety on this network during the trial period.

Page 7 of the report indicate that the pilot road network should cover approximately 900 km, divided into approximately 865 km of motorways, 15 km of other national roads and 25 km of municipal roads. The area is composed of ten logistic hubs, of which six are located in municipal areas, three public ports and one on private land. Page 13 of the report indicates in a map the network recommended for the trial.

Pages 9, 10 and 11 of the report indicate that the trial shall be conducted for a period of 5 years. The report recommends that the trial shall be performed with a certain type of double trailers, the 'variant A-double, this is, with a total length of up to 32 meters with the possibility of additional length of up to 2 meters. The report also recommends that the maximum weight of the double trailers shall be from 70 to 72 tonnes, depending on the combustion of the engine.

The report proposes that the Danish Road Directorate and the Danish Transport Authority, in dialogue with industry organizations, the police, etc. prepare an overall status report after the first and third year of the trial period.

In addition, specific requirements are considered in view of equipping double-trailers with latest traffic accident control technology and therefore ensuring a sufficient level of road safety (page 8 of the report). For the trial, the report requires that all double-trailers shall be equipped with an Emergency Braking System (page 46 of the report), Electronic Stability Control (page 43 of the report).

On pages 52-53, the report estimates that the authorisation of double-trailers on a limited road network during the trial period will allow a socio-economic benefit of approximately 300 million DKK. This socio-economic cost covers the construction/adaptation costs of the roads, the operation and maintenance costs, to be offset by savings on drivers' wages and equipment, lower driving costs, reduced emissions and noise, as well as lower fuel taxes and tolls.

And estimate of climate effects:

Pages 10 and 53 of the report provide an estimate of the climate benefits entailed by the measures included in the report. The report estimates that such measure would reduce CO2 emissions by 1 500 tonnes by 2026, after full phasing-in. Overall, the reduction could reach 22 000 tonnes over a period of 15 years. In addition, the socio-economic analysis provided (page 53 of the report) estimates the reduction of CO2 emission to entail a socio-economic benefit of DKK 6 million and air pollution an additional 6 million DKK.

The report explains (page 53) the assumptions taken for the calculation of the climate effects of the initiative. For the calculation of CO2 emission, the report uses assumptions made for the trial of double-trailers used in Sweden (between Gothenburg and Malmö), with an assumption 1.5 kg of CO2 per kilometre driven.

In the report (page 55) the assumption is stated that the introduction of double-trailer will also lead to a shift of freight transport from rail to road, with a negative partial impact on CO2. However, the report does not provide a quantification of this.

Road safety conditions and finances, including investments in rebuilding the road network:

The report indicates that longer vehicles present challenges in relation to the other traffic and the design of the road network. Therefore, a test is planned to be conducted in a way that minimises both the need for road changes and the road safety challenges, in line with the investment description set out in the Council Implementing Decision.

On page 8 the report indicates at the increased risk of introducing double-trailers for road safety can be mitigated by restricting their use to roads with the lowest risk of accidents. The report recommends that concrete and targeted road improvements should be made on the road network. It explains (page 10) that the use of double trailers will trigger a cost of around 34.5 million DKK

needed for road conversion and 1.5 million DKK for the update of traffic counting equipment and IT development of systems, for the experimental road network.

The report shall propose actions that are compliant with the DNSH requirement:

Denmark explained in pages 2 and 3 of the summary document, that the measures set out in the recommendations of the report are compliant with the DNSH requirement and the six environmental objectives.

i. The measures that form part of the recommendations of the report will contribute to <u>climate change mitigation</u>. The expected saving of CO2 emissions as a result of the proposed trial road network are 22 000 tonnes of CO2 for the proposed trial period of 15 years (page 10 of the report). Secondly, the recommended initiatives lead to decreased emissions and thereby supports climate change mitigation. The proposed initiatives have the potential to reduce fuel use, increasing fuel efficiency, and significantly reducing greenhouse gas emissions (page 14 of the report). The report presents options based on the best available technology for double-trailer trucks (pages 45-46 of the report), given that zero-emission technology does not apply for double trailers since there is no market for that technology for

<u>https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690888/IPOL_STU(2021)69</u> <u>0888_EN.pdf</u> (pages 35-38). This thereby justifies DNSH compliance with the climate change mitigation objective since the initiative leads to decreased emissions for double-trailer trucks and would make use of the best-available technologies in the market.

- ii. The measures that form part of the recommendations from the report will not significantly harm climate change adaptation. They will not lead to the construction of new roads, as the trial will be made on an existing road network and will therefore not entail the construction of additional roads. They only apply to existing roads. As mentioned above, the presented recommendations will furthermore minimize the need for road changes (page 53 of the report) as they will entail only minimal improvements in the existing network to allow double trailers to circulate. This thereby justifies DNSH compliance with climate change adaption objective.
- iii. The measures that form part of the recommendations from the report will not significantly harm the sustainable use and protection of water and marine resources. The report encourages the usage of sustainable road transport and limits the usage of polluting and emitting vehicles. The measures are not expected to have an implication for the use and protection of water services. This thereby justifies DNSH compliance with the objective on sustainable use and protection of water and marine resources.
- iv. The measures that form part of the recommendations will not significantly harm circular economy, including waste prevention and recycling. The report quantifies the potential reductions in emissions. The measures will not lead to significant inefficiencies in the use of resources nor to increase the generation of waste, taking into account both the direct and primary indirect effects across the life cycle, which justifies DNSH compliance with the circular economy objective, including waste prevention and recycling.
- v. Furthermore, the measures that form part of the recommendations will not significantly harm pollution prevention and control to air, water or land. The recommendations from the report would, if enacted, indirectly reduce emissions of pollutants into air, water and land because the report shows that emissions will be reduced. The socio-economic analysis provided (page 10 of the report) estimates the reduction of air pollution to entail a socio-economic benefit of DKK 6 million. This thereby justifies DNSH compliance with the objective on pollution prevention and control to air, water or land.
- vi. Lastly, the measures that form part of the recommendations will not significantly harm the protection and restoration of biodiversity and ecosystems. The proposed trial road network is not located in or near biodiversity-sensitive areas (including the Natura 2000 network of

protected areas, UNESCO World Heritage sites and Key Biodiversity Areas, as well as other protected areas). Pollutants are strictly regulated in Danish environmental laws and their emissions will not be impacted by the recommendations. This thereby justifies DNSH compliance for the protection and restoration of biodiversity and ecosystems.

The proposed initiative is thereby compliant with the DNSH requirement from the Council Implementing Decision.

Furthermore, in line with the description of the measure, an analysis shall be carried out by the Danish Road Directorate and the Danish Road Traffic Authority. This analysis is part of the report quoted above, which provides the evidence for the fulfilment of the milestone. It was prepared by the Danish Road Directorate (page 1 of the report) and the Danish Road Traffic Authority (Færdselsstyrelsen). The Danish Road Traffic Authority was responsible for the preparation of the sections of the report relating to regulation, EU legislation and the technical conditions of the double trailers, while the Danish Road Directorate prepared the overall analysis (such as in relation to the road network and the options considered for the use of double-trailers) and held meetings with the organisations involved in road freight transport (page 7) in order to facilitate the preparation of the report.

Furthermore, in line with the description of the measure, the analysis shall cover the efficiency of the road design, planning and test rides. On page 10, the report acknowledges that the road network for double trailers will require a specific road design to allow for an efficient circulation of double trailers, in particular to facilitate their manoeuvring and parking.

The efficiency of the road design is also reflected by page 8 of the selection of the double-trailer trial road network, close to the largest areas of transport and logistics, with access to the motorway network within a range of 5 km.

The report nonetheless highlights that further discussions with municipalities and stakeholders will have to take place after the publication of the report to ensure the efficiency of the road design (page 10), in particular regarding the specific improvement works required at local level.

Lastly, on page 10, the report indicates that funds will need to be allocated for an efficient administration of the scheme that would include implementing solutions to ensure that vehicles use only the permitted road network.

In terms of planning, on page 10, the report considers that the test rides shall be conducted for a period of five years.

Furthermore, in line with the description of the measure, based on the analysis it shall be possible to decide which reconstructions can and shall be carried out in order to ensure both traffic safety and traffic flow on the certain road network. As indicated above, the report recommends that the pilot road network should cover approximately 900 km (page 7 of the report) of existing roads, divided into approximately 865 km of motorways, 15 km of other national roads and 25 km of municipal roads. The area is composed of ten logistic hubs, of which six are located in municipal areas, three public ports and one on private land. The network recommended for the trial is shown page 13 of the report.

In order to ensure both traffic safety and traffic flow, the report recommends that concrete and targeted road improvements should be made on the road network. It explains (page 10) that the use of double trailers will trigger a cost of around DKK 34.5 million needed for road conversion and DKK 1.5 million for the update of traffic counting equipment and IT development of systems, for the experimental road network.

The traffic flow of the selected road network was taken into consideration (page 8). It will be close to the largest areas of transport and logistics, and warrant access to the motorway network within a range of 5 km.

Number: 49	Related Measure: C5.18. Subsidy scheme to green ferries
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Name of the Milestone: A political agreement has been adopted among a majority of parties in the Danish Parliament on green transition of ferries.

Qualitative Indicator: The government and parliament reach a political	
agreement on the specific green maritime sector which is signed and	Time: Q2 2021
published at the relevant ministry's website.	

Context:

The objective of the measure is to subsidize the purchase of zero or low emission ferries or retrofitting of existing ferries (15 ferries in total).

Milestone 49 covers the political agreement between the government and parliament on the subsidy scheme for the green transition of ferries. The subsidy scheme must co-finance the acquisition of new green ferries, or the retrofitting of existing ferries or charging infrastructure. The beneficiaries must be municipalities. The subsidy percentage must be of 15-25%. The following criteria must be used for the subsidy: (i) the CO2 effect and environmental effect per invested DKK; (ii) the funds shall only be used for investments in new green ferries, retrofit or other necessary infrastructure such as charging stations for the ferries. No further legislation is necessary beyond the political agreement.

Milestone 49 is the first step of the implementation of the investment, and it will be followed by target 50, consisting in the purchase or retrofitting of at least 15 green ferries. The investment has the final expected date for implementation in Q4 2025.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. **Political agreement on the green transition of the specific maritime sector** of 19 April 2021 ('Aftale mellem regeringen (Socialdemokratiet), Radikale Venstre, Socialistisk Folkepari, Enhedslisten og Alternativet om: Udmontning af midler fra gron transportpulje II til omstilling af indenrigsfaerger'), with a majority of 96 votes out of 175. The political agreement was published on 19 April 2021 on the website of the Danish Ministry of Transport.

Link to the publication: <u>https://www.trm.dk/media/jn1bqy2t/endelig-aftaletekst-om-groen-transportpulje-ii-final-a-1.pdf</u>

The authorities also provided:

i. Addendum to the political agreement on the green transition of the specific maritime sector of 23 September 2021 ('*Tillaegsaftale til aftale 19 april 2021 mellem regerinen (Socialdemokratiet), Radikale Venstre, Socialistisk Folkeparti, Enhedslisten og Alternativet om: Udmontning af midler fra gron transportpulje II til omstilling af indenrigsfaerger*'). It was published on 23 September 2021 on the website of the Danish Ministry of Transport. Link to the publication: <u>https://www.trm.dk/media/fdmjl2p5/tillaegsaftale-til-aftale-om-groen-transportpulje-ii.pdf</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The government and parliament have reached a political agreement on the subsidy scheme for the green transition of ferries:

Denmark provided the political agreement of 19 April 2021 and its addendum from 23 September 2021. As explained in the summary document and evidenced by the political agreement, the agreement has been adopted between five out of ten parties (the governing party Social Democratic Party (*Socialdemokratiet*), as well as the parties Radical Left (*Radikale Venstre*), Socialist People's Party (*Socialistisk Folkeparti*), Unity Party (*Enhedslisten*) and Alternative Party (*Alternativet*)) with the majority of members from the Danish parliament (page 1 in political agreement on the green transition of the specific maritime sector from 19 April 2021). At the time, the parties represented a majority of 96 seats out of 179 seats as per the website of the Parliament: https://www.ft.dk/-/media/sites/ft/pdf/folkestyret/valg-og-afstemninger/folketingsvalg-fra-1953.ashx

In addition, the addendum to the political agreement has been adopted between five out of ten parties (the governing party Social Democratic Party (*Socialdemokratiet*), as well as the parties Radical Left (*Radikale Venstre*), Socialist People's Party (*Socialistisk Folkeparti*), Unity Party (*Enhedslisten*) and Alternative Party (*Alternativet*) with the majority of members from the Danish parliament on 23 September 2021 (page 1 in the addendum to the political agreement from 23 September 2021).

The Council Implementing Decision states that the political agreement should be reached and signed. In accordance with Danish parliamentary procedures, political agreements are not signed. They are agreements amongst legislative coalitions obliging the parties to vote in favour of the agreed law or legislative package in Folketinget and give all parties in the conciliation community a veto right in relationship to amendments to the consensual legislation. Nonetheless, the agreement of the political parties is evidenced by the publication of the document and the presence of the respective parties on the first page of the agreement. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

The subsidy scheme shall co-finance the acquisition of new green ferries, retrofitting existing ferries or charging infrastructure.

Page 2 of the political agreement on the green transition of the specific maritime sector from 19 April 2021 specifies that the subsidy scheme co-finances the acquisition of new green ferries, retrofitting existing ferries or charging infrastructure.

The beneficiaries shall be municipalities.

Page 2 of the political agreement of the specific maritime sector of 19 April states that: '1. In the light of the results of the ferry analysis, the entire pool of DKK 200 million is allocated to the conversion of **municipal** domestic ferries.'

The subsidy percentage shall be of 15-25%. The following criteria shall be used for the subsidy: The CO2 effect and environmental effect per invested DKK.

Page 2 of the political agreement specifies that 'The pool is allocated on the basis of the principle of technology neutrality. The subsidy will amount to 20% of the investment for part exceeding the investment volume on a similar diesel ferry. The rest of the investment is subsidised by 15%. For retrofit, 25 % grants are granted.'

The addendum to the political agreement includes a new wording: '*The subsidy will amount to 25%* of the investment, irrespective of whether it involves the purchase of a ferry or retrofit of an existing ferry'. With this addendum to the political agreement, the subsidy amounts up to 25% of the investment, regardless of whether project regards a new acquisition of a new ferry or retrofit of an existing ferry, which is thereby in line with the Council Implementing Decision milestone requirement.

On the allocation criteria, the political agreement of 19 April specifies on page 2 that:

 The criteria for the subsidy will be as (i) CO2 reduction by krone spent and achieved via economies of scale and (ii) reduction of other emissions.

These criteria are in line with the Council Implementing Decision, which specifies the criteria for the subsidy as follows: the CO2 effect and environmental effect per invested DKK.

The funds shall only be used for investments in new green ferries, retrofit or other necessary infrastructure such as charging stations for the ferries.

As mentioned above under the point 'The subsidy scheme shall co-finance the acquisition of new green ferries, retrofitting existing ferries or charging infrastructure', page 2 of the political agreement of 19 April 2021 includes this specific requirement.

No further legislation is necessary as the political agreement along with finance act 2021 provide the relevant legal basis.

The political agreement of 19 April 2021 and the addendum to political agreement of 23 September 2021 are the relevant legal basis, therefore no further legislation is necessary.

Commission Preliminary Assessment: Satisfactorily fulfilled

Related Measure: C7.I1: Research in green solutions: Carbon capture and storage Number: 64 or use of CO2 Name of the Milestone: Selection of mission roadmaps for 'carbon capture and storage or use of CO2'. Qualitative Indicator: Innovation Fund Denmark has selected the roadmaps for the mission 'carbon capture and storage or use of Time: Q3 2021 CO2' Context: The measure aims at providing the public and private sectors with incentives to boost research and development, particularly in innovative green technologies in carbon capture and storage or use of CO2. Milestone 64 requires Innovation Fund Denmark to select the roadmaps to propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'carbon capture and storage or use of CO2' on the basis of an open call. This is the first of the four missions of the research programme to accelerate the development of climate-friendly technology solutions. Milestone 64 is the first step of the implementation of the investment, and it will be followed by targets 65 and 66, related to selection and funding of at least one public-private partnership on 'carbon capture and storage or use of CO2'. The investment has a final expected date for implementation in Q4 2022. Evidence provided: In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided: Summary document duly justifying how the milestone (including all the constitutive i. elements) was satisfactorily fulfilled. ii. the selected and published roadmaps for the mission for 'carbon capture and storage or use of CO2': a) The Green CCUS Roadmap - Towards a fossil free future published on the website of Innovation Denmark on 16 August 2021.

 b) Mission CCUS Roadmap – a roadmap for Carbon Capture, Utilisation and Storage published on the website of Innovation Denmark on 16 August 2021.

Link to the publication: <u>https://innovationsfonden.dk/da/p/innomissions/mission-driven-green-research-and</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

Innovation Fund Denmark has selected the roadmaps.

In August 2021, two selected roadmaps for the mission for 'carbon capture and storage or use of CO2' were published by Innovation Fund Denmark in their website following the launch of the open call for Innomission partnerships and subsequent independent evaluation process.

To propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'carbon capture and storage or use of CO2'. Both selected roadmaps, 'The Green CCUS' and 'The mission CCUS', propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development for the related mission. As indicated in pages 11-16, 'The Green CCUS' roadmap focuses on technology development within carbon capture at point sources, biogas upgrading and methanisation, uptake and storage in biomass and ecosystems, storage in geological repositories and minerals, pyrolysis, biochar and storage in soils and sediments, carbon storage in the built environment, biorefinery for chemicals and materials, direct CO2 air capture, CO2 for fuels, chemicals, and carbon-rich materials, and sector coupling. 'The Mission CCUS' roadmap outlines possible work streams focusing on CO2 capture (page 11), CO2 storage and transport (pages 12 to 15), and CO2 utilization (page 16).

The roadmaps provide a comprehensive overview of the steps to be taken to achieve the two goals outlined by the government (i.e. (i) 70% reduction of greenhouse gas emissions (GHG) in Denmark by 2030 and net-zero emissions by 2050 and strengthen environment and nature; and (ii) contribute to increased competitiveness of the Danish businesses and industries) and form the basis for the call for 'Innomission partnerships'. As a basis for outlining work streams and activity ideas, roadmaps describe the global position of the field and an evaluation of key challenges and corresponding Danish strongholds (page 11 of the Green CCUS Roadmap; pages 7-9 of the Mission CCUS roadmap) and provide an analysis of specific paths of action and effort needed, i.e. work streams and activity ideas, in regard to technology, implementation and financing, to achieve specific goals, critical milestones and inflection points within the mission (pages 20-27 of the Green CCUS Roadmap and pages 10-29 of the Mission CCUS roadmap).

Moreover, the proposed partnership initiatives aim to establish an appropriate balance between the activities suggested by both roadmaps to secure both short term impacts and long-term innovation efforts along the value chain covering CO2 capture, intermediate/permanent storage, infrastructure/ transport and sector coupling activities.

Furthermore, in line with the description of the measure, the objectives of the partnerships under this mission are to develop cost-effective CO2 capture solutions from the largest emitters or from the atmosphere and store carbon or use it in new climate neutral energy sources. The partnerships achieve these objectives, because they create economic incentives to use carbon capture and storage or use of CO2 and strengthen the research in the geological preconditions for storing CO2 in Denmark, developing the material to capture carbon, and developing methods of analysis that may monitor and prevent leakage as follows: Mission 1 roadmaps were specifically evaluated on their potential to form the basis of a partnership with the objectives to develop cost-effective CO2 capture solutions from the largest emitters or from the atmosphere and store carbon or use it in new climate neutral energy sources. Concretely, first roadmap, 'The Mission CCUS' focuses on economic incentives to use carbon capture and storage or use of CO2 in the implementation gap analysis (page 19). The roadmap also suggests research in storage in geological repositories and minerals (pages 13 - 14), in the

development of materials to capture carbon in research in utilization of CO2 for fuels, chemicals, and carbon-rich materials (page 16) and in digital technologies such as real-time secure monitoring of CCUS (page 17). The second roadmap, 'The Green CCUS' addresses cost reduction of carbon capture (table 1 page 12), research and development needs regarding storage of CO2 in the Danish underground (pages 13 – 15), the use of CO2 for chemicals and materials (pages 16 – 17), and optimization of monitoring procedures in relation to CO2 storage.

Furthermore, in line with the description of the measure, in its review of applications for this mission, Innovation Fund Denmark took into account the relation with the development and demonstration project of CO2 storage sites in depleted oil and gas fields in the Danish sector of North Sea that are initiated in component 2.3 on "Energy efficiency, green heating and Carbon Capture and Storage", to avoid any overlaps: Concretely, one of the evaluation criteria in the open call for partnerships was that the plan for organizing the partnerships must ensure continuous alignment of the roadmaps with other initiatives such as, for instance, the initiative in component 2.3 (evaluation criteria no. 2 'Execution – implementing the roadmaps, on p. 6 of the call for applications). Additionally, the Mission CCUS roadmap takes into account the relation to the initiative concerning component 2.3 on "Energy efficiency, green heating and Carbon Capture and Storage, where the initiative is mentioned as part of the financial roadmap for the mission as the initiative offers specific funding for offshore storage options (page 28).

On the basis of an open call.

In accordance with the requirement of the Council Implementing Decision on selecting roadmaps on the basis of an open call, the call was publicly announced on the website of Innovation Fund Denmark in January 2021 with application deadline in May 2021 (https://innovationsfonden.dk/da/p/innomissions/roadmaps-mission-driven-green-research). The call was open for all relevant actors from multiple fields of research and development areas which were invited to take part in the development of mission roadmaps. This included knowledge institutions, Research and Technology Organisations (GTS institutes), companies (start-ups, SMEs, large companies), investors, municipalities, cluster organisations, etc. Innomission roadmaps were evaluated on their overall impact and value creation potential for the Danish businesses and society including their potential for securing existing- and creating new jobs and export of green solutions. For the purpose of evaluating the robustness of the Innomission roadmap as well as the impact and value creation the following criteria were used: Impact, Innovation and Excellence. Roadmaps were evaluated by international peers and Innovation Fund Denmark's Board of Directors.

Number: 67	Jumber: 67 Related Measure: C7.I2: Research in green solutions: Green fuels for transport		
	and industry		
Name of the Mile	Name of the Milestone: Selection of mission roadmaps for 'green fuels for transport and industry'		
	tor: Innovation Fund Denmark has selected the roadmaps for	Time: Q3 2021	
the mission 'greer	n fuels for transport and industry'	1111e. Q5 2021	
Context:			
The measure aims at providing the public and private sectors with incentives to boost research and			
development, particularly in innovative green technologies in green fuels for transport and industry.			
Milestone 67 requires Innovation Fund Denmark to select the roadmaps to propose ideas for work			
streams and activities to overcome challenges that Denmark is facing in regard to research and			
development, for the mission for 'green fuels for transport and industry' on the basis of an open call.			
This is the second of the four missions of the research programme to accelerate the development of			
climate-friendly technology solutions.			

Milestone 67 is the first step of the implementation of the investment, and it will be followed by targets 68 and 69, related to the selection and funding of at least one public-private partnership on 'green fuels for transport and industry'. The investment has a final expected date for implementation in Q4 2022.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. The decisions of the Innovation Fund Denmark selecting the roadmaps on 18 June 2021.
- iii. The **selected and published roadmaps** for the mission for 'green fuels for transport and industry':
 - a) Green Fuels in Transport and Industry published on the website of Innovation Denmark on 16 August 2021.
 - b) Leveraging Danish strengths to mature and scale up e-fuels for transport published on the website of Innovation Denmark on 16 August 2021.

Link to the publication: <u>https://innovationsfonden.dk/da/p/innomissions/mission-driven-green-research-and</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

Innovation Fund Denmark has selected the roadmaps.

In August 2021, two selected roadmaps for the mission for 'green fuels for transport and industry' were published by Innovation Fund Denmark following the launch of the open call for Innomission partnerships and subsequent independent evaluation process.

The Board Decision of the Innovation fund Denmark selecting the roadmaps demonstrates that Innovation Fund Denmark selected the roadmaps.

To propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'green fuels for transport and industry'.

Both selected roadmaps, 'Green Fuels in Transport and Industry' and 'Leveraging Danish strengths to mature and scale up e-fuels for transport', propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development for the related mission. The first roadmap, 'Green Fuels in Transport and Industry', pages 8 to 15 and 16 to 24, proposes an approach towards achieving climate neutrality by 2050 taking into account the national set goals for CO₂ reductions in 2030, scarcities in the availability of resources along the path, actions needed in relation to investments, and identified gaps regarding research and development in the area of transport for heavy-consumption means of transport (road transport, heavy-duty transport, air transportation, etc.) including a strong focus on supporting a market for hydrogen through clear support for planned large-scale Power-to-X demonstration plants and the required increase in power production capacity; The second roadmap, 'Leveraging Danish strengths to mature and scale up e-fuels for transport', on pages 13 to 25 and 26-27, describes pathways focusing on such as hydrogen electrolysis, storage, transport and distribution, carbon capture and green sources of fuels.

Furthermore, in line with the description of the measure, the objective of this mission is to develop new solutions to create new green fuels, including green hydrogen, and demonstrate how Power-to-X systems may be integrated in the overall energy system. Investing in targeted research-, development and demonstration efforts to bring currently costly green fuels to a level of technological maturity facilitates commercial use and deployment of such technologies at a larger scale: The first roadmap 'Green Fuels in Transport and Industry' emphasizes that technological development within the main technological pathways outlined in the roadmap (1. Green hydrogen (for heavy duty land transport), 2. Intermediary fuels (green methanol - MeOH/Dimethyl ether - DME and Bio-oil), and 3. Green fuels for shipping and aviation) is vital to increasing efficiency, bringing down the cost of green fuels and bringing forth a transition where technologies can be deployed at a larger scale (roadmap pages 2-3).

The second roadmap 'Leveraging Danish strengths to mature and scale up e-fuels for transport' focuses on how an R&D effort within the main technological pathways for renewable hydrogen (hydrogen electrolysis, storage, transport and distribution, Carbon Capture, E-Methanol, Aviation (e-Kerosene), and shipping (e-Ammonia)) and power-to-X can bring technologies to a maturity level that will reduce the cost of green fuels (roadmap pages 27 – 28).

On the basis of an open call.

In accordance with the requirement of the Council Implementing Decision on selecting roadmaps on the basis of an open call, the call was publicly announced on the website of Innovation Fund Denmark in January 2021 with application deadline in May 2021 (https://innovationsfonden.dk/da/p/innomissions/roadmaps-mission-driven-green-research). The call was open for all relevant actors from multiple fields of research and development areas which were invited to take part in the development of mission roadmaps. This included knowledge institutions, Research and Technology Organisations (GTS institutes), companies (start-ups, SMEs, large companies), investors, municipalities, cluster organisations, etc. Innomission roadmaps were evaluated on their overall impact and value creation potential for the Danish businesses and society including their potential for securing existing- and creating new jobs and export of green solutions. For the purpose of evaluating the robustness of the Innomission roadmap as well as the impact and value creation the following criteria were used: Impact, Innovation and Excellence. Roadmaps were evaluated by international peers and Innovation Fund Denmark's Board of Directors.

Commission Preliminary Assessment: Satisfactorily fulfilled

Number: 70	Number: 70 Related Measure: C7.I3: Research in green solutions: Climate- and environment friendly agriculture and food production		
Name of the M	Name of the Milestone: Selection of mission roadmaps for 'climate- and environment friendly		
agriculture and	food production'.		
Qualitative Indi	cator: Innovation Fund Denmark has selected		
the roadmaps for	or the mission 'climate- and environment friendly	Time: Q3 2021	
agriculture and	food production'.		
Context:			
The measure aims at providing the public and private sectors with incentives to boost research and development, particularly in innovative green technologies in climate- and environment friendly agriculture and food production.			
Milestone 70 requires Innovation Fund Denmark to select the roadmaps to propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'climate- and environment friendly agriculture and food production' on the basis of an open call. This is the third of the four missions of the research programme.			
	Milestone 70 is the first step of the implementation of the investment, and it will be followed by targets 71 and 72 related to funding at least one public private partnership on (climate, and		

Milestone 70 is the first step of the implementation of the investment, and it will be followed by targets 71 and 72, related to funding at least one public-private partnership on 'climate- and environment friendly agriculture and food production'. The investment has a final expected date for implementation in Q4 2022.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the target (including all the constitutive elements) was satisfactorily fulfilled.
- The selected and published roadmap for the mission for 'climate- and environment friendly agriculture and food production': AgriFoodTure roadmap published on the website of Innovation Denmark on 16 August 2021.
 Link to the publication: <u>https://innovationsfonden.dk/da/p/innomissions/mission-driven-green-research-and</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

Innovation Fund Denmark has selected the roadmaps.

The Council Implementing Decision states mission roadmaps would be selected by Innovation Fund Denmark. Denmark has provided one roadmap instead of multiple. The selected roadmap selected by Innovation Fund on the basis of an open call, AgriFoodTure, is based on collaborative efforts between universities, industry and organisations and provides all required elements stemming from the Council Implementing Decision. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

In August 2021, the selected roadmap for the mission for 'climate- and environment friendly agriculture and food production' was published by Innovation Fund Denmark following the launch of the open call for Innomission partnerships and subsequent independent evaluation process.

To propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'climate- and environment friendly agriculture and food production'.

The selected roadmap, 'AgriFoodTure' proposes ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development for the related mission. The 'AgriFoodTure' roadmap describes research and innovation needs within for instance new breeding techniques in plant-based food production (pages 15 - 16), new precision farming technologies (pages 8 - 9), new cultivation and fertilization methods and systems (pages 7 - 8). It identifies four major tracks/work streams where efforts are needed within: A) Future land use and management (pages 7 - 9), B) Animal-based food production (pages 10 - 13), C) Plant-based food production (pages 14 - 17), and D) Biotechnology-based food production and alternative protein sources (pages 18 - 21). The roadmap provides a comprehensive overview of the steps to be taken to achieve the goals outlined by the government and forms the basis for the call for Innomission partnerships. As the basis for identifying work streams and activity ideas, the roadmap describes the global position of the field and an evaluation of key challenges and corresponding Danish strongholds (pages 2-4) and provides an analysis of specific paths of action and effort, such as work streams and activity ideas, needed, in regard to technology, implementation and financing, to achieve specific goals, critical milestones and inflection points within the mission (pages 7-27). The 'AgriFoodTure' roadmap was specifically evaluated on its potential to accomplish the objective of the mission objective, including the description of type of activities that are to be funded within the mission, as described above. The mission roadmap (phase 1) describes pathways focusing on the contribution to the overall goals of (i) 70% reduction of carbon emissions by 2030 compared

with 1990 levels and (ii) carbon neutrality no later than 2050. The roadmap outlines gaps, solutions, and Danish strongholds relevant for achieving the overall goals of reduction of greenhouse gas

emissions, increase of biodiversity, reduction of pesticide use and nutrient runoff. As this is a highly complex task, complementary expertise and collaboration involving research, innovation, and implementation in all steps of the value chain are required and the roadmap includes four major development paths, where largest efforts are needed. The focus of the first path, 'Future land use and management' is to maintain sustainable production and earnings. The focus of the second path, 'Animal-based food production' is to reduce emissions and bring research and innovation into the area of new breeding techniques. The third one, 'Plant-based food production' aims at delivering on precision agriculture techniques and reduction of pesticide use and nutrient runoff. Finally, fourth and last path 'Biotechnology-based food production and alternative protein sources' aims at maintaining sustainable production and bringing research and innovation into the area of food production. In addition, the roadmap also addresses cross cutting issues (e.g. cross-disciplinary collaboration in accounting greenhouse gas emission reductions, digitalisation, incentives, documentation and regulation) and data-driven governance elements given the task at stake.

On the basis of an open call.

In accordance with the requirement of the Council Implementing Decision on selecting roadmaps on the basis of an open call, the call was publicly announced on the website of Innovation Fund 2021 application deadline 2021 Denmark in January with in May (https://innovationsfonden.dk/da/p/innomissions/roadmaps-mission-driven-green-research). The call was open for all relevant actors from multiple fields of research and development areas which were invited to take part in the development of mission roadmaps. This included knowledge institutions, Research and Technology Organisations (GTS institutes), companies (start-ups, SMEs, large companies), investors, municipalities, cluster organisations, etc. Innomission roadmaps were evaluated on their overall impact and value creation potential for the Danish businesses and society including their potential for securing existing- and creating new jobs and export of green solutions. For the purpose of evaluating the robustness of the Innomission roadmap as well as the impact and value creation the following criteria were used: Impact, Innovation and Excellence. Roadmaps were evaluated by international peers and Innovation Fund Denmark's Board of Directors.

Number: 73	Related Measure: C7.I4: Research in green solution on reuse and reduction of plastic and textile wast		
Name of the Mi	Name of the Milestone: Selection of mission roadmaps for 'circular economy focusing on reuse		
	f plastic and textile waste.		
Qualitative Indi	cator: Innovation Fund Denmark has selected		
the roadmaps for	or the mission 'circular economy focusing on	Time: Q3 2021	
reuse and reduc	tion of plastic and textile waste'.		
Context:			
The measure aims at providing the public and private sectors with incentives to boost research and			
development, particularly in innovative green technologies in circular economy focusing on reuse			
and reduction of plastic and textile waste.			
Milestone 73 requires Innovation Fund Denmark to select the roadmaps to propose ideas for work			
streams and activities to overcome challenges that Denmark is facing in regard to research and			
development, for the mission for 'circular economy focusing on reuse and reduction of plastic and			
textile waste' on the basis of an open call. This is the fourth of the four missions of the research			
programme.	programme.		
Milestone 73 is	Milestone 73 is the first step of the implementation of the investment, and it will be followed by		
targets 74 and 7	targets 74 and 75, related to funding at least one public-private partnership on 'circular economy		

focusing on reuse and reduction of plastic and textile waste'. The investment has a final expected date for implementation in Q4 2022.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- ii. The **selected and published roadmap** for the mission for 'circular economy focusing on reuse and reduction of plastic and textile waste': Circular economy with a focus on plastics and textiles, A 2030 & 2050 Roadmap, published on the website of Innovation Denmark on 16 August 2021.

Link to the publication: <u>https://innovationsfonden.dk/da/p/innomissions/mission-driven-green-research-and</u>

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

Innovation Fund Denmark has selected the roadmaps.

The Commission considers that there is a clerical error in the text of the Council Implementing Decision as regards the qualitative indicators of the milestone and has undertaken the assessment on a revised basis. Such description links the roadmap for the mission 'carbon capture and storage or use of CO2' instead of 'circular economy focusing on reuse and reduction of plastic and textile waste'. However, the mission 'carbon capture and storage or use of CO2' is linked to Investment 1 'Carbon capture and storage or use of CO2' under Component 7, and not with Investment 4 'Circular economy focusing on the use and reduction of plastic and textile waste' under the same Component. Against this background, the justification and substantiating evidence provided by the Danish authorities cover all constitutive elements of the milestone.

The Council Implementing Decision states mission roadmaps would be selected by Innovation Fund Denmark. Denmark has provided one roadmap instead of multiple. The selected roadmap selected by Innovation Fund on the basis of an open call, "Circular economy with a focus on plastics and textiles, A 2030 & 2050 Roadmap", is based on collaborative efforts between universities, industry and organisations and provides all required elements stemming from the Council Implementing Decision. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

In August 2021, the selected roadmap for the mission for 'circular economy focusing on reuse and reduction of plastic and textile waste' was published by Innovation Fund Denmark following the launch of the open call for Innomission partnerships and subsequent independent evaluation process.

To propose ideas for work streams and activities to overcome challenges that Denmark is facing in regard to research and development, for the mission for 'circular economy focusing on reuse and reduction of plastic and textile waste.

The roadmap proposes three tracks or possible work streams with a focus on 1. Plastics, 2. Textiles, and 3. A common track (page 9). The timeline for three tracks (plastics, textile, and a common track) is presented in the roadmap on pages 20-23. The initiatives are grouped into circular focus areas: materials, design & production, systems & services, and recovery. Overall, the roadmap provides a comprehensive overview of the steps to be taken to achieve the goals outlined by the government and form the basis for the call for Innomission partnerships. As a basis for identifying work streams and possible activity ideas, the roadmap describes the global position of the field and an evaluation

of key challenges and corresponding Danish strongholds (pages 3-6) and provides an analysis of specific paths of action and effort, such as work streams and activity ideas, needed, in regard to technology, implementation and financing, to achieve specific goals, critical milestones and inflection points within the mission (pages 7-24 and 25-30).

Roadmap for "circular economy with a focus on plastics and textiles" proposes a governance model with a broad partnership including all Danish Universities, all University Colleges, GTS Institutes, two Clusters and Museums. Industry stakeholders have been interviewed for feedback and adjustments. The vision for this roadmap is a Danish society with full circularity by 2050. The roadmap presents a timeline for realisation of the initiatives divided into activities in the first year and subsequent activities towards 2030 and 2050 that could result in a significant reduction of greenhouse gas emissions, fossil fuel and water consumption. Plastics and textiles are faced with common challenges and would benefit greatly from synergies across sectors. To address the challenges identified in the roadmap 32 specific initiatives, grouped as 13 plastics, 10 textiles and nine common initiatives are suggested by Denmark's leading researchers (pages 25 to 28). The mission will focus on increasing resource productivity ('common' track on pages 22 and 23); decreasing plastic and textile waste ('plastics' and 'textile' tracks on pages 20, 21, 22); and increasing the use of reusable materials (under materials and recovery in the circular focus areas). As a result, all steps in the value chain will be funded to reduce waste, ranging from product design to consumer behaviour as initiatives are grouped into circular focus area: materials, design & production, systems & services, and recovery. The expected impacts of the implementation of this roadmap initiatives will result in a reduction of CO2 emissions, fossil fuel and water consumption of 63%, 65% and 50% by 2030, respectively. For 2050, reductions of CO2 emissions, fossil fuel and water consumption of 97%, 95%, and 60%, respectively. Additionally, 7 500 jobs expected by 2030 and 12 600 in 2050.

On the basis of an open call.

In accordance with the requirement of the Council Implementing Decision on selecting roadmaps on the basis of an open call, the call was publicly announced on the website of Innovation Fund Denmark in January 2021 with application deadline in May 2021 (https://innovationsfonden.dk/da/p/innomissions/roadmaps-mission-driven-green-research). The call was open for all relevant actors from multiple fields of research and development areas which were invited to take part in the development of mission roadmap This included knowledge institutions, Research and Technology Organisations (GTS institutes), companies (start-ups, SMEs, large companies), investors, municipalities, cluster organisations, etc. Innomission roadmaps were evaluated on their overall impact and value creation potential for the Danish businesses and society including their potential for securing existing and creating new jobs and export of green solutions. For the purpose of evaluating the robustness of the Innomission roadmap as well as the impact and value creation the following criteria were used: Impact, Innovation and Excellence. Roadmaps were evaluated by international peers and Innovation Fund Denmark's Board of Directors.

Number: 76	Number: 76 Related Measure: C7.I5: Incentives to boost R&D in companies		
Name of the Milestone: The bill on deductions for research and development work enters into			
force			
Qualitative Indicator: The bill on deductions for research and development			
work has been adopted by the Danish Parliament and enters into force			
Context:			
The measure aims at establishing a deduction scheme for all companies to increasingly engage in			
research and development investments. Research and development investments will benefit from a			

tax rebate, implying an economic incentive for such investments. The objective of this investment to frontload investments in research and development, both in the context of the recovery and in the coming years by incentivizing companies to increase their overall research and development spending. Milestone 76 requires the bill on deductions for research and development work to enter into force. Milestone 76 is the first step of the implementation of the investment that will be followed by target 77, related to 500 firms having used the tax deduction provided by the deductions for research and development work. The investment has a final expected date for implementation in Q3 2023.

Evidence provided:

In line with the verification mechanism set out in the Operational Arrangements, the following evidence was provided:

- i. **Summary document** duly justifying how the milestone (including all the constitutive elements) was satisfactorily fulfilled.
- Copy of the publication of the law on the green tax No. 2020/1 LSV 178 (Forslag til Lov om ændring af afskrivningsloven, ligningsloven, pensionsafkastbeskatningsloven og lov om afgift af svovl (Forhøjelse afgrænsen for straksafskrivning m.v., midlertidig forhøjelse afafskrivningsgrundlaget for nye driftsmidler, forlængelse af denmidlertidige forhøjelse af fradrag for udgifter til forsøgs- ogforskningsvirksomhed og forlængelse af bundfradrag i svovlafgiften) reform including deductions for research and development, published on 8 December 2020, adopted by the Danish Parliament on 13 April 2021 and entered into force on 21 April 2021. Link: https://www.retsinformation.dk/eli/lta/2021/672

The authorities also provided:

- i. **Previous Depreciation Act**, No. 242 (Bekendtgørelse af lov om skattemæssige afskrivninger (afskrivningsloven) cf. Consolidation Act No. 242 of 18 February 2021.
- ii. **Previous Tax Assessment Act**, No. 806 (*Bekendtgørelse af lov om påligningen af indkomstskat til staten (ligningsloven*) cf. Consolidation Act No. 806 of 8 August 2019.

Analysis:

The justification and substantiating evidence provided by the Danish authorities covers all constitutive elements of the milestone.

The bill on deductions for research and development work has been adopted by the Danish Parliament and entered into force.

The bill on the green tax reform including the deductions for investments in research and development was introduced on 8 December 2020 and was adopted by the Danish Parliament on 13 April 2021. The provisions (Sections 1, No. 5 and Section 2, No. 1.) entered into force on 21 April 2021.

The adopted bill No. 672 of 19 April 2021 was published on the Danish Official Journal online Retsinformarion.dk.

The measure shall extend the basis for depreciation and the basis for deduction for all private sector research and development expenses by 130% of in the financial year of 2022.

The adopted bill No. 672 of 19 April 2021 included the deductions for investments in research and development and the extension of the increased deduction for research and development by 130 percentage points entering into force and effective for the fiscal year of 2022 (Sections 1, No. 5 and Section 2, No. 1.). The increased deduction for all private research and development was thereby extended to the fiscal year 2022.

Sections 1, No. 5 and Section 2, No. 1 of the bill relate to investments in research and development. The bill raised with an additional 25 percentage points for the income year 2021 and 2022 with a ceiling of 910 million DKK. This is added to the existing deduction for research and development expenses by 105 percentage points resulting in 130 percentage points in all private sector research and development

The deductions for research and development work shall be effective as from the date according to the law.

The relevant legislative provisions have entered into force on 21 April 2021, increasing an additional 25 percentage points the deduction for research and development expenses, resulting in 130 percentage points in all private sector, for the income year 2021 and 2022 (Sections 1, No.5 and Section 2, No. 1). Furthermore, in line with the description of the investment, the objective of this measure shall be to frontload investments in research and development, both in the context of the recovery and in the coming years by incentivizing companies to increase their overall research and development spending. This increased deduction included in bill No. 672 with adjustments to (i) section 6 of the Depreciation Act No. 242 of 18 February 2021 and (ii) section 8 B of the Tax Assessment Act No. 806 of 8 August 2019 creates an incentive for companies to invest in R&D as it makes it cheaper, hence more attractive, which is also part of the requirement of investment description in the Council Implementing Decision.

Additionally, the deduction is also expected to encourage smaller firms to increasingly engage in research and development, since they qualify for the deduction as well, since the ceiling of 910 million DKK in the law ensures that smaller companies have a relatively greater advantage than larger companies. The adjustments made by law No. 672 (i) section 6 of the Depreciation Act No. 242 of 18 February 2021; and (ii) section 8 B of the Tax Assessment Act No. 806 of 8 August 2019 allow all firms to qualify for the deality for the deduction.

Research and development related to exploration and extraction of fossil fuels and raw materials shall not qualify for the tax deduction. Provisions of the Depreciation Act section 6, subsection 1, No. 3, do not allow for depreciation on operating assets and ships used for exploration for fossil fuels and other raw materials. Provisions of the Tax Assessment Act section 8 B, subsection 1, ensure that deductions for expenses for research and development do not apply to expenses related to exploration for fossil fuels and other raw materials. Finally, the deduction for expenses used for the extraction of fossil fuels and other raw materials are not covered by these provisions.