

PPS-I 2025 Call Innovations for Carbon Capture and Utilisation (CCU)

If you are planning to conduct chemistry and/or biobased research into innovations for Carbon Capture and Utilisation (CCU), you can apply for a PPS-i allowance for 2025 from the TKI (Top consortium for Knowledge and Innovation) for Green Chemistry and Circularity by submitting an application no later than 14:00:00 on 16 September 2025. Please find the submission requirements below.

Introduction

The TKI for Green Chemistry and Circularity has made €5,000,000 available for public-private partnerships that conduct research into innovations relating to water quality, biobased raw materials, and carbon capture and utilisation (CCU). This call text relates to the theme of 'innovations for Carbon Capture and Utilisation (CCU)'. A circular carbon economy, and therefore Carbon Capture and Utilisation, is a top-priority theme in the mission-driven top sector and innovation policy, and the biobased and chemistry industry plays a vital part in realising innovations in this context. The TKI is issuing this call to stimulate innovation within this specific theme and wishes to encourage young researchers and SMEs in particular to submit an application.

Scope of the call

Carbon capture and utilisation (CCU) involves capturing CO_2 from the air, seawater or industrial processes and either using it directly or converting it into valuable products such as fuels, chemicals, and building materials. This approach not only helps reduce greenhouse gas emissions but also creates economic opportunities by transforming waste CO_2 into useful resources. This open call aims to advance the development of innovative technologies and methodologies that can effectively capture and utilize carbon dioxide (CO_2) to mitigate climate change and promote sustainable industrial practices.

The urgency of addressing climate change necessitates a multifaceted approach that includes both emission reductions and active removal of CO_2 from the atmosphere. Current CCU technologies are often limited by high costs and energy requirements. Therefore, proposals that focus on overcoming these challenges through innovative solutions are encouraged. We invite consortia to submit proposals that address one or more of the following objectives:

- Innovative Capture Technologies: Development of new materials or processes that enhance the efficiency and cost-effectiveness of CO₂ capture.
- Utilisation Pathways: Exploration of novel methods to convert captured CO₂ into valuable products, including synthetic fuels, feedstock chemicals, and construction materials.
- Integration with Renewable Energy: Strategies to integrate CCU technologies with renewable energy sources to maximize environmental benefits.
- Life Cycle Analysis: Comprehensive assessment of the environmental and economic impacts of CCU technologies, including their potential to reduce overall carbon footprints.
- Scalability and Implementation: Research on the scalability of CCU technologies and their potential for widespread industrial adoption.

The potential for CCU to contribute to a circular carbon economy, where CO_2 is continuously recycled and reused, represents a significant opportunity for sustainable development for the Netherlands. Proposals should consider the broader implications of their research on global carbon management strategies and the transition to a low-carbon economy. We invite collaborations that contribute on the following industrial end-goal and milestone:



Milestones:

- Greenhouse Gas Reduction Goal: Achieve a 59% reduction in CO₂ equivalent emissions by 2030 compared to 1990 levels, as outlined in the Dutch Climate Agreement (Klimaatakkoord, Deel C).
- Climate Neutral Production: Attain climate-neutral production by 2050, in alignment with the Dutch Climate Agreement (Klimaatakkoord, Deel C).

Proposals that involve CO₂ capture only are excluded from this call for proposals.

Knowledge dissemination and shared knowledge building

The TKI for Green Chemistry and Circularity promotes knowledge dissemination and shared knowledge building. As part of this, project leaders and project participants are expected to participate in a programme day in Q4 2026 / Q1 2027 to share their project results. In addition, the TKI for Green Chemistry and Circularity asks the project leaders to consider whether the system of 'learning communities' (https://www.wijzijnkatapult.nl/files/topsectoren/Topsectoren%20Toolkit.pdf) can be deployed during the course of the project to promote skills building by students and teachers/researchers. Depending on the TRL phase of the project, this could involve students from universities (lower TRLs) and/or universities of applied science (higher TRLs). For help with the latter, the HCA coordinator of ChemistryNL can also be contacted: onno.devreede@chemistrynl.com.



Requirements for a CCU application

Applicants

The call is open for applications from public-private partnerships. The primary applicant must be a researcher with a position at a Dutch knowledge institution for the duration of the project or longer. Furthermore, at least one Dutch private party must be a (financial) participant in the partnership.

> Scope of the call

The application must fit the scope of this call. This can be found on page 1.

Conditions for using the PPS-i-allowance

The terms and conditions as described in Annex A apply to the PPS-i-allowance 2025.

Maximum PPS-i-allowance per project an call budget

The maximum PPS-i-allowance 2025 per project is €150,000.

The total budget for the calls 'biobased raw materials', 'water quality' and 'carbon capture and utilisation (CCU) is €5,000,000. The budget per call is €1,666,666. This amount can be changed in case of under- or over spending in one of the specific calls.

> Application submission - template and deadline

Applications must be submitted via an 'allowance use plan'. Allowance use plans must be drawn up in accordance with the templates in Annexes B and C. The TKI for Green Chemistry and Circularity will only consider applications drawn up in accordance with these templates. Applications must be submitted by email to and aanvragen@chemistrynl.com with 'Aanvraag PPS-i-toeslag 2025 CCU' (Application for PPS-i allowance 2025 CCU) in the subject line. The deadline for submission is **14:00:00** on **16 September 2025**.

Please note that we will not consider applications that are incomplete or incorrectly drawn up.

To avoid this, you can have your application checked for completeness prior to submitting your definitive version. If you wish to have your application checked, please send your draft application by email to aanvragen@chemistrynl.com by 14:00:00 on 9 September 2025 at the latest.

Your definitive version must be submitted by 14:00:00 on 16 September 2025 at the latest.

Project end date

This scheme applies to research projects with an end date before or on 31 December 2030. The end date <u>cannot</u> be extended.

Young researchers and SMEs

The TKI for Green Chemistry and Circularity encourages the participation of young researchers and SMEs.

Critical raw materials

TKI for Green Chemistry and Circularity also aims to avoid the use of critical raw materials. Research proposals that do not use critical materials are therefore preferred.



Required co-funding by a private party

The project must involve actual public-private collaboration and the private party must cofinance the project. The minimum private co-financing for this call is:

- 30% for fundamental research,
- 50% for industrial research,
- 75% for experimental research.

At least 50% of the co-financing must be in the form of a financial contribution ('in cash'). This rule does not apply to SMEs (small and medium-sized enterprises) that participate as project partners in the project. SMEs may freely distribute their co-financing between contributions in kind ('in kind') or financial contributions ('in cash'). Public parties can also contribute to a project, but this contribution does not count as private co-financing. Project costs of private parties are not eligible for subsidy.

Procedure

- 1. You have to submit an application in the form of a PPS-i-allowance use plan by means of the templates in Annexes B and C to aanvragen@chemistrynl.com (specifying 'Aanvraag PPS-i-toeslag 2025 CCU' in the subject line) by 14:00:00 on 16 September 2025 at the latest.
- 2. After submission, the us plans will be assessed by a committee. This committee consists of, among others, representatives from the ChemistryNL program councils. The committee provides advice to the Board of Directors of the TKI Green Chemistry and Circularity regarding the approval of the application for PPS-i-allowance 2025. Assessment criteria are:
 - alignment with the scope of the call
 - feasibility of the research idea
 - strength of the consortium
 - innovative character and social and/or economic impact.
- 3. The Board of Directors of the TKI for Green Chemistry and Circularity is expected to make its decision on awarding the PPS-i-allowance 2025 in Q4 2025. Should the budget of €5,000,000 not be sufficient for the number of applications on which the committee has given positive advice, then the Board of Directors will decide on the allocation, taking into account policy considerations and diversity in research topics. You cannot appeal the decision of the Board of Directors.

Questions and information

If you have any questions or require further information, please contact the PPS-i coordinator of the TKI for Green Chemistry and Circularity, Harmen Veldman (phone: +31 6 31976594, email: h.veldman@chemistrynl.com

The TKI for Green Chemistry and Circularity wishes you good luck in developing your public-private partnership projects and looks forward to receiving your application.



Annexes

Annex A: Terms and conditions for award and use of a 2025 PPS-i allowance

Annex B: Allowance use plan Annex C: Budget form (Excel)



Annex A: Terms and conditions for award and use of a 2025 PPS-i-allowance

The following terms and conditions apply for the award and use of the 2025 PPS-i-allowance.

1) Use of the PPS-i allowance

You will use the PPS-i allowance for the allowance use plans involving a real public-private partnership* as granted by the Board of Directors of the TKI for Green Chemistry and Circularity.

*Actual partnership: A collaboration between at least two independent parties to exchange knowledge or technology, or to realise a joint objective on the basis of a division of tasks, where the parties jointly decide on the scope of the partnership project, contribute to its execution, and share the risk and results. One or more parties may cover the total costs of the project, thereby releasing the other parties from the financial risks associated with the project. Contract research and conducting research services are not considered to be a partnership.

2) The PPS-i-allowance scheme

All activities to be undertaken must comply with the terms and conditions for PPS-I cooperation projects as set forth in the *Regeling Nationale EZK-subsidies* (Scheme for National Subsidies from the Ministry of Economic Affairs and Climate Policy) and as defined by the RVO Netherlands Enterprise Agency (<u>Link</u>). The obligations of a PPS allowance recipient as defined in these schemes apply in full to your organisation in the context of the funds made available to you by the TKI for Green Chemistry and Circularity.

3) Private contribution

The project must involve actual public-private collaboration and the private party must co-finance the project. The minimum private co-financing for this call is:

- 30% for fundamental research,
- 50% for industrial research,
- 75% for experimental research.

At least 50% of the co-financing must be in the form of a financial contribution ('in cash'). This rule does not apply to SMEs (small and medium-sized enterprises) that participate as project partners in the project. SMEs may freely distribute their co-financing between contributions in kind ('in kind') or financial contributions ('in cash'). Public parties can also contribute to a project, but this contribution does not count as private co-financing. Project costs of private parties are not eligible for subsidy.

4) Costing method

You must calculate the costs specified for partnership projects for which the PPS-i-allowance will be used in accordance with the standard methods as described in articles 10 up to and including 15 of the *Kaderbesluit nationale EZK-en LNV-subsidies* (Framework decision on national subsidies granted by the Ministry for Economic Affairs and Climate Policy and the Ministry of Agriculture, Nature and Food Quality) (Link). The costs will be considered without VAT if the allowance recipient that incurred the costs is able to deduct VAT.

5) Availability of the allowance

The TKI for Green Chemistry and Circularity will make the allowance available to your organisation as an advance under the terms and conditions applying to the use of the PPS-i-allowance. The allowance will be paid in several tranches amounting to 90% of the allowance granted. The remaining 10% will be settled at the time of the final allowance review. You will receive an allowance tranche scheme with the approval of your allowance use plan.



6) Period of use

The period of use for the PPS-i-allowance ends on 31 December 2029. You will not be able to use the PPS-i allowance after this date.

7) Reporting requirement

You must submit a research and financial report on the progress of activities in the previous year in Q1 of every year. This is done in the context of monitoring by the RVO Netherlands Enterprise Agency. In addition, the TKI may request information for purposes of the annual report of the TKI for Green Chemistry and Circularity.

8) Request for allowance review

You must submit a full *Aanvraag Vaststelling Toeslag* (request for allowance review) to the TKI for Green Chemistry and Circularity within eight weeks following completion of the project. Such a request for allowance review consists of a financial and research justification and an audit statement by an independent auditor when the PPS-i-allowance exceeds €125,000. This limit does not apply for each (sub)project but for the total sum of the 2024 PPS-i-allowance used. A statement from the Board of Directors must be included for sums not exceeding €125,000.

9) Communication

- Upon the TKI's written request, you must make up-to-date information about the partnership
 projects for which the allowance is used available to the general public in an easily accessible
 manner.
- The TKI bureau will provide support in communications relating to the use of the PPS-iallowance in your organisation, among other things via ChemistryNL's (social) media channels.
- You must also include the following statement or an equivalent thereof in publications resulting
 from an activity funded in part with an PPS-i allowance: 'This activity was cofunded by the TKI
 for Green Chemistry and Circularity with a PPS-i allowance from the Ministry of Economic Affairs
 and Climate Policy'. Please use the ChemistryNL logo where possible.
- The RVO Netherlands Enterprise Agency and ChemistryNL publish a brief description of all
 projects funded with a PPS-i-allowance on their websites. This brief description includes the
 names of participating companies.