



CALL FOR EXPERTS EUROPEAN PROJECT STAND4PURITY

UNI, as an affiliated partner of the European *STAND4PURITY* project (*Standards for minimum CO₂ purity – GA 101260885*), is looking for **10 experts** in the following areas **of the value chain for carbon capture, utilization, and storage (CCUS)**:

- technologies for capturing and measuring CO₂ content;
- purification and utilization;
- transport and materials;
- geological storage;
- regulation and financial aspects.

The selected experts will participate in the project as **subcontractors of UNI** and will **work closely with UNI and the other selected experts** to carry out the technical and scientific activities envisaged by the initiative. In particular, the project's ultimate goal is to develop a European pre-standardization document that includes considerations on the minimum CO₂ purity requirements for transport and storage.

The collaboration will be organized mainly through online meetings. **However, all selected experts will be required to attend two face-to-face meetings (each lasting one day):** one at UNI's headquarters in Milan (in Italy, tentatively in May 2026); a second probably in Brussels at the CEN/CENELEC headquarters (indicatively in September 2026) or, alternatively, elsewhere in Europe (probably in Milan). Travel costs will be covered by the selected experts.

The Stand4purity project officially started on December 1st, 2025 (M1 = month 1).

Subcontracting agreements for the *STAND4PURITY* project should start indicatively in January 2026.

The skills required for the 10 positions, the activities to be carried out, and the selection criteria are described in this call for experts.



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REQUIRED SKILLS, EXPECTED OUTPUTS, AND SELECTION CRITERIA

EXPERT 1: Expert in CO₂ capture and measurement systems

- **Skills:** Proven skills in the main capture technologies (with solvents, cryogenic, etc.) and in the design and verification of CO₂ measurement and monitoring systems in the various phases (dense, gaseous, and liquid), with experience in regulation and regulatory alignment.

- **Selection criteria:**

At least 2 of the following requirements:

- 1) At least 7 years of experience:
 - a) in industry as a technical director or equivalent managerial position in CO₂ capture plants with proven knowledge of flow and composition measurement techniques
 - b) academic experience in CO₂ capture systems and flow and composition measurements
- 2) Number of peer-reviewed publications (at least 7 in the last 4 years related to the main field of expertise)
- 3) Involvement in relevant industrial or research projects on the subject, and/or experience in regulatory contexts or standardization projects (ISO, CEN)

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for drafting the pre-standardization document.

Organization and implementation of two Technical Workshops (online):

- 1) Impact of impurities on phase behaviour (in month 3 of the project);
- 2) Challenges in measurement and monitoring (in month 4 of the project).

The organization includes workshop planning (with the support of UNI, choice of date, stakeholder involvement, registration management, and link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop delivery, follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).

Within the final pre-standardization document, creation of two sections: one dedicated to the impact of impurities on phase behaviour and one dedicated to challenges in measurement and monitoring. By month 6 of the project.

Review of the final pre-regulatory document (month 11 - month 12 of the project).



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- **Budget and payment terms:** for the activities of expert 1, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshop under his/her responsibility; completion of the sections under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 2: Expert in hard-to-abate industrial CO₂ streams

- **Skills:** Knowledge of hard-to-abate sectors (cement, steel, etc.) and proven expertise in the characterization of typical impurities in CO₂ streams in relation to capture technology.

- **Selection criteria:**

Both of the following requirements:

- 1) At least 5 years of experience:
 - a) in CO₂ capture systems for hard-to-abate sectors with knowledge of typical impurities in streams in the relevant sector
 - b) academic sector, in CO₂ capture systems and flow and composition measurements. Number of peer-reviewed publications (at least 7 recent ones related to the main field of expertise).
- 2) Involvement in relevant industrial or research projects on the topic, and/or in CEN/ISO activities.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents). This expert will primarily work as a support consultant to be involved during strategic checkpoints.

Review of the pre-standardization document (month 11 - month 12 of the project).

- **Budget and payment terms:** for the activities of expert 2, a maximum gross fee (all charges included) of €4,000 is envisaged (for an estimated commitment of approximately 10 working days), to be paid in three instalments, each corresponding to participation and feedback on the documents circulated (after the kick-off meeting; after active participation in the workshop in month 6 of the project; after the revision of the pre-standardization document), according to the terms of the contract that will be stipulated with UNI following the assignment of the work.



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EXPERT 3: Expert in CO₂ conversion/utilization

- **Skills:** Proven experience in the main areas of CO₂ utilization such as e-fuels, methanol production, plastics production, and other industrial processes. Ability to define flow quality requirements in terms of components for specific conversion processes.

- **Selection criteria:**

At least 2 of the following requirements:

- 1) At least 5 years of experience:
 - a) in industrial plants using CO₂
 - b) academic experience in CO₂ utilization processes.
- 2) Number of peer-reviewed publications (at least 5 recent ones related to the main field of expertise).
Alternatively, number of proven collaborations with relevant international working groups (at least 3).
- 3) Involvement in relevant European or industrial-scale research projects.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents). This expert will primarily work as a support consultant to be involved during strategic checkpoints.

Review of the pre-standardization document (month 11 - month 12 of the project).

- **Budget and payment terms:** for the activities of expert 3, a maximum gross fee (all charges included) of €4,000 is envisaged (for an estimated commitment of approximately 10 working days), to be paid in three instalments, each corresponding to participation and submission of feedback on the documents circulated (after the kick-off meeting; after active participation in the workshop in month 6; after the revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 4: Expert in purification technologies

- **Skills:** Proven practical experience in CO₂ purification plants, impurity removal techniques, and the definition of tolerance thresholds.



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- Selection criteria:

At least 2 of the following requirements:

- 1) At least 5 years of experience:
 - a) in an industrial setting as a technical director or equivalent managerial position in CO₂
 - b) academic experience in CO₂ purification systems and measurement techniques
- 2) Number of peer-reviewed publications (at least 5 recent ones related to purification technologies, including, for example, their economic evaluation).
Alternatively, number of proven collaborations with relevant international working groups (at least 3).
- 3) Involvement in relevant European or industrial-scale research projects, and/or in regulatory contexts or standardization projects (ISO, CEN)

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for drafting the pre-standardization document.

Organization and implementation of a Technical Workshop (online):

- 1) Capture and purity (at month 3 of the project).

The organization includes workshop planning (with the support of UNI, choice of date, stakeholder involvement, registration management, and link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop delivery, follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).

Within the final pre-standardization document, creation of a section dedicated to purification technologies. By month 6 of the project.

Revision of the final pre-standardization document (month 11 - month 12 of the project).

- **Budget and payment terms:** for the activities of expert 4, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshop under his/her responsibility; completion of the section under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.



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EXPERT 5: Expert in transport materials and corrosion

- **Skills:** Specific expertise on the effects of various impurities (such as H₂O, O₂, NO_x, SO₂, H₂S, etc.) on CO₂ transport infrastructure, including experience in corrosion models, material selection, and network design adaptations.

- **Selection criteria:**

At least two of the following requirements:

- 1) Proven experience with infrastructure/transportation system materials that can lead to specific phenomena (e.g. corrosion) in the presence of CO₂
- 2) Involvement in EU projects (preferably Innovation Fund), as team leader for the topic of the CO₂ transport
- 3) Experience in regulatory contexts or standardization projects (ISO, CEN)

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for drafting the pre-regulatory document.

Organization and implementation of 3 Technical Workshops (online):

- 1) Material compatibility and corrosion (in month 4 of the project);
- 2) Multimodal transport (month 5);
- 3) Round table on interoperability challenges (month 6).

The organization includes workshop planning (with the support of UNI, choice of date, stakeholder involvement, registration management, and link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop delivery, follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).

Within the final pre-standardization document, creation of a section dedicated to the topic of material compatibility and corrosion, multimodal transport, and interoperability challenges. By the end of month 6 of the project.

Revision of the final pre-standardization document (month 11 - month 12 of the project).

Budget and payment terms: for the activities of expert 5, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshops under his/her responsibility; completion of the section



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under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 6: Expert in well materials and cementation

- **Skills:** Proven expertise in material properties and well cementation, as well as in the chemical properties of injected fluids and the conditions that preserve structural integrity (corrosion reduction and leak prevention).

- **Selection criteria:**

At least 2 of the following requirements:

- 1) At least 5 years of industrial or academic experience in CCUS infrastructure and storage sites.
- 2) Number of peer-reviewed publications (at least 5 recent ones related to the required field of expertise). Alternatively, number of proven collaborations with relevant international working groups (at least 3).
- 3) Experience in regulatory contexts or standardization projects (ISO, CEN). Or involvement in EU projects (preferably Innovation Fund), preferably in at least one as team leader for the technical part of CO₂ storage.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for the drafting of the pre-standardization document.

Organization and implementation of a Technical Workshop (online) in collaboration with the expert 7:

- 1) Storage Requirements (at month 5 of the project).

The organization includes workshop planning (with the support of UNI, choice of date, stakeholder involvement, registration management, and link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop delivery, follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).

Within the final pre-standardization document, creation of a section dedicated to the topic of storage requirements (with a focus on material properties and well cementation). By the end of month 6 of the project.

Review of the final pre-regulatory document (month 11 - month 12 of the project).



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- **Budget and payment terms:** for the activities of expert 6, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshops under his/her responsibility; completion of the section under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 7: Expert in impurity effects on storage infrastructure

- **Skills:** Proven experience in the effects and impact of various impurities (such as H₂O, O₂, NO_x, SO₂, H₂S, etc.) on storage infrastructure, including the behaviour of the corrosive phenomenon, the selection of materials, and the necessary design modifications.

- **Selection criteria:**

At least 2 of the following requirements:

- 1) At least 5 years of industrial or academic experience in CCUS storage infrastructure and sites.
- 2) Number of peer-reviewed publications (at least 5 recent ones related to the required field of expertise). Alternatively, number of proven collaborations with relevant international working groups (at least 3).
- 3) Experience in regulatory contexts or standardization projects (ISO, CEN). Or involvement in EU projects (preferably Innovation Fund), preferably in at least one as team leader for the technical part of CO₂ storage.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for the drafting of the pre-standardization document.

Organization and implementation of a Technical Workshop (online) in collaboration with expert 6:

- 1) Storage requirements (at month 5 of the project).

The organization includes workshop planning (with the support of UNI, date selection, stakeholder involvement, registration management, and link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop delivery, follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).



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Within the final pre-standardization document, creation of a section dedicated to the topic of storage requirements (with a focus on the effects and impact of different impurities on storage infrastructure). By the end of month 6 of the project.

Revision of the final pre-regulatory document (month 11 - month 12 of the project).

- **Budget and payment terms:** for the activities of expert 7, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshops under his/her responsibility; completion of the section under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 8: Expert in carbon markets, ETS, and regulatory frameworks

- **Skills:** Proven experience in the European Emissions Trading System (EU ETS) or other comparable regulatory frameworks, knowledge of carbon reduction regulatory requirements, and ability to integrate purity levels into market mechanisms.

- **Selection criteria:**

At least 2 of the following requirements:

- 1) Working knowledge of the EU ETS and European CO₂ pricing legislation (including allowance management, sectoral benchmarks, and compliance).
- 2) Practical experience in carbon market instruments (credit transactions, carbon removal project management, voluntary or regulated certifications)
- 3) Participation in funded projects or experience in relevant regulatory contexts.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for drafting the pre-standardization document.

Organization and implementation of a Technical Workshop (online):

- 1) Workshop on the Regulatory Gap (at month 6 of the project).

Organization includes workshop planning (with UNI support, date selection, stakeholder involvement, registration management, link creation, etc.), content preparation (agenda, slides, speakers, questions for participants, expected outputs, etc.), workshop



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and follow-up (creation of a post-workshop document highlighting existing gaps and market needs on the workshop topics).

Within the final pre-standardization document, creation of a section dedicated to the issue of regulatory gaps. By the end of month 6 of the project.

Revision of the final pre-standardization document (months 11-12 of the project).

- **Budget and payment terms:** for the activities of expert 8, a maximum gross fee (all charges included) of €6,200 is envisaged (for an estimated commitment of approximately 15 working days), to be paid in three instalments, each corresponding to the receipt and acceptance of the three required outputs (after the kick-off meeting; completion of the workshops under his/her responsibility; completion of the section under his/her responsibility and revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 9: Expert in technical risk assessment for CCUS

- **Skills:** Proven experience in assessing the technical risks associated with transport (via pipeline, ship, truck) and geological storage of CO₂, including the impact of impurities on material integrity and operational reliability.

- **Selection criteria:**

Both of the following requirements:

- 1) Expertise in technical risk assessment in the field of CCUS
- 2) Ability to build risk matrices and mitigation plans.

- **Involvement:** Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), including sessions with UNI for drafting the pre-standardization document.

Review of the final pre-standardization document (month 11 - month 12 of the project).

Budget and payment terms: for the activities of expert 9, a maximum gross fee (all charges included) of €4,000 is envisaged (for an estimated commitment of approximately 10 working days), to be paid in three instalments, each corresponding to participation and submission of feedback on the documents circulated (after the kick-off meeting; after active participation in the workshop in month 6 of the project; after



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the revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.

EXPERT 10: Expert in CCUS strategy and EU-funded projects

- **Skills:** Enabler profile with consolidated experience along the CCUS value chain, strong involvement in funded design, strategic vision, and knowledge of European project dynamics and policies.

- **Selection criteria:**

At least two of the following requirements:

- 1) At least 7 years of experience in managing European projects (Horizon, Innovation Fund, IPCEI) in the energy/environmental sector with a specific focus on CCUS
- 2) Proven experience in networking and coordination between technical and institutional stakeholders
- 3) Number of publications (at least 5 on relevant topics related to CO₂)

Having served as coordinator in several European projects (at least 2 in the CCUS field) will be considered a plus.

Involvement: Active participation in all main project activities (kick-off meeting, technical workshops/review of workshop follow-up documents), coordinating and facilitating sessions with UNI for drafting the pre-standardization document.

Review of the final pre-standardization document (month 11 - month 12 of the project).

- **Budget and payment terms:** for the activities of expert 10, a maximum gross fee (all charges included) of €13,300 is envisaged (for an estimated commitment of approximately 33 working days), to be paid in three instalments, each corresponding to participation and submission of feedback on the documents circulated (after the kick-off meeting; after active participation in the workshop in month 6 of the project; after the revision of the pre-standardization document), according to the terms of the contract to be signed with UNI following the assignment of the work.



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All documents and workshops organized as part of the project must be in English.

ADDITIONAL ELIGIBILITY CRITERIA AND MODULES TO ANSWER TO THE CALL

In addition to the requirements listed in the previous section, the following are required:

- Proven professional knowledge of the English language.
- Willingness to undertake two trips within Europe at your own expense.

THE FOLLOWING ARE A PLUS

- Experience in funded projects (in particular, *Innovation Fund*).
- Knowledge of technical standardization and ISO/EN standards on CCUS

If you are interested, please write to tiziana.tavolieri@uni.com, dafne.sgarra@uni.com, cristina.dimaria@uni.com, by January 9th, 2026, indicating "STAND4PURITY_candidature EXPERT#: title" and **attaching the application form**, an up-to-date **CV**, and a **quote specifying its validity for at least 3 months** (containing the following note: STAND4PURITY_GA 101260885).

The selection process involves the analysis of applications by a UNI team.



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THE STAND4PURITY PROJECT

Start date: December 1, 2025 | **Approximate end date:** November 30, 2026

Approximate duration: 12 months

Carbon capture, utilization, and storage (CCUS) consists of a set of technologies that are essential for reducing CO₂ emissions, particularly in strategic sectors where decarbonization is technically complex or economically unsustainable. Currently, although CCUS technologies are sufficiently mature and ready for implementation, the regulatory framework is still outdated and incomplete, significantly hindering and delaying the full exploitation of CCUS's potential.

To date, there are no detailed standards on CO₂ quality requirements, and operational specifications are still mostly defined on a case-by-case basis by the various players in the supply chain, resulting in unnecessary costs.

To respond effectively to these challenges, it is essential that policymakers and standardization bodies actively support the definition of common quality and purity standards for CO₂ measurement, composition analysis, and fluid properties in order to correctly identify impurity contents and enable the full implementation of cross-border CO₂ transport and infrastructure interoperability.

Stand4Purity enables coordinated action to achieve pre-regulatory results in the sector, ensuring that the needs and interests of the entire CCUS supply chain are represented. The expected progress concerns:

- supporting the definition of minimum CO₂ quality standards applicable to all industrial carbon management solutions, to ensure the free movement of CO₂, avoiding fragmentation and ensuring the interoperability of Transport and Storage (T&S) operations;
- identifying the main challenges related to interoperability, taking into account the different modes of transport (pipelines, ships, trains, and trucks), which are currently intended to transport CO₂ with different levels of purity;
- Supporting stakeholder involvement in existing CEN/ISO committees to ensure that their needs and expectations are adequately taken into account.



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