4.5.2023

EU/271/2023 EU/271/2023-YM-3

Finland - Report on Implementation of Directive 2009/31/EC on the geological storage of carbon dioxide ("CCS Directive")

Changes, reviews and updates of national implementation legislation

1. Are there any changes to national legislation, permitting system or competent authorities that have taken place since the last report on implementation of the CCS Directive in your country?

The first report, pursuant to Article 27 of the CCS Directive, was sent to the Commission on May 10, 2012. That report included a comprehensive report on the Finnish legislation and permitting systems relating to the CCS Directive, including the Finnish Act on Carbon Capture and Storage (416/2012) (CCS Act).

Regarding the permitting system Finland has introduced new temporary (2023-2026) legislation where priority in environmental permitting is given to green transition projects, including CCS/CCU, that adhere to "do no significant harm" principle (DNSH principle).

2. Are there processes in place for storage permit applicants to engage pro-actively with the competent permitting authorities regarding relevant applications? If yes, please provide details.

No. According to CCS Act the geological storage of carbon dioxide is banned in Finland and its exclusive economic zone (EEZ). This is due to the fact that subterranean geological formations in Finland and its EEZ are not suitable for permanent and safe geological storage of carbon dioxide.

3. Please provide the name, email address and telephone of the contact point at the competent authority responsible for fulfilling the duties established under the Directive.

The Centres for Economic Development, Transport and the Environment (ELY) are responsible for overseeing and monitoring the environmental impacts of a carbon capture installation in their territory, as well as for supervising other environmental provision in the Act

Permits for a carbon capture installation would be issued by Regional State Administrative Agencies (AVI)

The Energy Authority acts ia. as the emissions trading authority in Finland, and according to the CCS Act, it would also be responsible for supervising access to CCS-pipelines, if they were built in the future.

The Ministry of the Environment has overall responsibility for supervising and monitoring the implementation of the CCS Act.

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4. Are there any issues that the competent authority would like to discuss with other competent authorities in relation to the practical implementation of the Directive and in particular the national permitting procedures in the Information Exchange Group under the auspices of Article 27(2)?

Topics that have relevance to cross-border CO₂ transport and storage as well as implications for development of fair and open access CO₂ transport and storage networks are especially interesting for Finland.

Selection of areas for storage sites (Article 4)

5. Which areas are determined from which storage sites may be selected pursuant to Article 4(1) until April 2023?

NA

6. Will additional areas be determined from which storage sites may be selected in the period until the next report at the end of 2027, if so, which geological type of areas are considered (e.g., saline aquifers, depleted or not depleted gas & oil fields, mafic rocks) from a geological point of view and what are the next steps?

Member States are not obliged to justify any such decision, but an indication which territories are concerned, including their location, and why this has been done, would be appreciated.

NA

7. Are there information about environmental and/or health risks relating to the geological storage of CO2 in accordance with the applicable Community legislation available to the public?

NA

Exploration permits (Article 5)

8. Are there areas or specific sites where no exploration permits are required to generate the information necessary for the selection of storage sites, pursuant to Article 5?

NA

9. How many exploration permits have been given pursuant to Article 5 since your last reporting?

NA

Storage permits applications (Article 10)

10. Member States shall make the permit applications available to the Commission within one month after receipt. Are there any plans of potential operators to apply for storage permits pursuant to Article 7? If yes, please provide an approximate timing.

NA

Third-party fair and open access (Article 21)

11. What measures – if any – have been taken to ensure that potential users are able to obtain fair and open access to transport networks and to storage sites for the purposes of geological storage of the produced and captured CO2 (Article 21)

Fair and open access to transport networks and storage sites is crucial as there are different circumstances in various MS. It is important that fair and open access to transport networks and storage sites is ensured in the development of the CO2 transport and storage markets.

Forums like CCS IEG and regional networks e.g. groups under the Nordic Council of Ministers provide opportunities to engage in discussions that can contribute towards these goals.

12. Are you aware that prospective transport operators and/or storage operators have refused access to their facilities on the grounds of lack of capacity?

No.

13. What measures – if any – have been taken to ensure that the operator refusing access on the grounds of lack of capacity or a lack of connection makes any necessary enhancements as far as it is economic to do so or when a potential customer is willing to pay for them? (Article 21)

NA.

Transboundary cooperation (Article 24)

14. Is there any experience or plans for transboundary CO2 transport or CO2 storage sites or storage complexes? Please provide details on the status of preparations, if any.

No.

CO2 capture readiness (Article 33)

15. How many combustion plants with a rated electrical output of 300 MW or more have received a permit since the last implementation report? What was the outcome of the assessment under Article 36 of Directive 2010/75/EU? In case of negative assessment, have the combustion plants set aside suitable space irrespectively? Please provide detail for each permit according to Annex 2.

There have not been any combustion plants with a rated electrical output of 300 MW or more that have received a permit since the last implementation report.

Further questions

16. What other national programmes are in place or planned to support research, demonstration and deployment of CCS?

There are no specific national programmes to support research, demonstration and deployment of CCS. However, CCS can be included in R&D funding programmes or decisions, of which many are technology neutral.

17. Are there any ongoing national or European research projects that may have relevance to the Directive?

The government funded a project that studied the current status of carbon capture, utilisation and storage (CCUS) and carbon dioxide removal (CDR) and the related prospects, especially from the perspective of Finland. The report took into account the state of technological development, key technology demonstrations, commercial projects, market outlooks and policies affecting the deployment of technologies in the European Union and in Finland. The report of the project 'Carbon dioxide use and removal: prospects and policies' is available at https://julka-isut.valtioneuvosto.fi/handle/10024/164795

18. Are there other plans to support further appraisal of CO2 storage sites, to prepare for CO2 transport infrastructure or for CO2 hubs and clusters?

No.

Annex 1: CCS related requests as part of the Commission Notice on the Guidance to Member States for the update of the 2021-2030 national energy and climate plans - C(2022) 8263 final

Annex 2: Operating licences granted to large combustion installations in accordance with Article 33

NA (see answer to question 15).