SEC. 3115. NATIONAL ACADEMY OF SCIENCES STUDY ON CARBON CAPTURE TECHNOLOGY.

(a) IN GENERAL.—The Secretary of Energy shall enter into an agreement with the National Academy of Sciences, Engineering, and Medicine to conduct a study evaluating the efficacy of carbon capture and storage technology by industry in reducing emissions and the cost-effectiveness of such technologies. Such study shall include a description of the following:

(1) Analysis of the effectiveness of emissions reductions and cost through implementation of carbon capture as compared to transitioning to other low-emissions technologies.

(2) Differences in performance of various carbon capture technologies and storage methods, including the net amount of carbon dioxide that can be permanently sequestered, the cost (in terms of dollar per ton captured/sequestered) of each technology, and the potential to increase the net amount
of carbon dioxide captured/sequestered and lower operational costs.

(3) Barriers, in terms of cost, infrastructure, geology, aquifers, and markets, to ensuring permanent carbon storage including both point of source capture and removal from the atmosphere of captured carbon dioxide.

(4) Analysis of the lifecycle emissions associated with carbon capture technologies, including construction and operation of the carbon capture technology, as well as transport, processing, and injection of carbon dioxide, including the permanence of carbon storage and sequestration, and strategies to reduce those emissions. This should include the amount of carbon dioxide emitted from a facility outfitted with carbon capture technologies that is permanently sequestered compared to the amount of carbon dioxide emitted by the carbon capture process itself.

(5) Evaluation of the impact of carbon capture technologies on air pollution, including particulate emissions and ozone precursors, with specific analysis on the impacts on communities historically overburdened with pollution, including rural communities.
(b) REPORT.—The agreement under subsection (a) shall specify that, not later than 1 year after the date of enactment of this Act, the National Academy of Sciences shall submit to Congress a report containing the results and findings of study authorized under this section.

Page 5, in the table of contents, after the matter related to section 3114, insert the following:

Sec. 3115. National Academy of Sciences study on carbon capture technology.