

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued April 8, 2013

Decided July 12, 2013

No. 11-1101

CENTER FOR BIOLOGICAL DIVERSITY, ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY AND LISA PEREZ
JACKSON,
RESPONDENTS

AMERICAN FOREST & PAPER ASSOCIATION, INC., ET AL.,
INTERVENORS

Consolidated with 11-1285, 11-1328, 11-1336

On Petitions for Review of Administrative Action
of the Environmental Protection Agency

Ann Brewster Weeks argued the cause for petitioners. With her on the briefs were *Lisa J. Zak*, *Frank Rambo*, *Morgan Butler*, *Kevin P. Bundy*, *Vera P. Pardee*, *Brendan R. Cummings*, *David D. Doniger*, *Meleah A. Geertsma*, and *Nathaniel S.W. Lawrence*. *Jonathan F. Lewis* entered an appearance.

Perry M. Rosen, Attorney, U.S. Department of Justice, argued the cause for respondents. With him on the brief was *Scott Jordan*, Attorney, U.S. Environmental Protection Agency.

Roger R. Martella Jr. argued the cause for respondent-intervenors. With him on the brief were *Timothy K. Webster*, *Lisa E. Jones*, *Joel F. Visser*, *Charles H. Knauss*, *Shannon S. Broome*, *Norman W. Fichthorn*, and *Allison D. Wood*. *William R. Murray Jr.* entered an appearance.

D. Cameron Prell, *Neal Cabral*, and *Lisa Sharp* were on the brief for *amicus curiae* National Association of Clean Water Agencies in support of respondents.

Before: HENDERSON, TATEL, and KAVANAUGH, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* TATEL.

Concurring opinion filed by *Circuit Judge* KAVANAUGH.

Dissenting opinion filed by *Circuit Judge* HENDERSON.

TATEL, *Circuit Judge*: As part of its ongoing effort to limit the emission of greenhouse gases, the Environmental Protection Agency issued a rule deferring regulation of “biogenic” carbon dioxide—non-fossil-fuel carbon dioxide sources such as ethanol—for three years. Citing scientific uncertainty over how to account for biogenic carbon dioxide’s unique role in the carbon cycle, EPA justified this “Deferral Rule” on the basis of the *de minimis*, one-step-at-a-time, and administrative necessity doctrines. Several environmental groups now petition for review, arguing that EPA’s

invocation of these doctrines was arbitrary and capricious. For the reasons set forth below, we vacate the Deferral Rule.

I.

Under the Clean Air Act, if EPA determines that an “air pollutant . . . may reasonably be anticipated to endanger public health or welfare,” 42 U.S.C. § 7521(a)(1), it must regulate that air pollutant under the Prevention of Significant Deterioration of Air Quality (PSD) and Title V permitting programs. *See Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 132–44 (D.C. Cir. 2012) (per curiam). The PSD program, which applies to areas of the country that are classified as in “attainment” or “unclassifiable” for any national ambient air quality standard, 42 U.S.C. §§ 7407(d)(1)(A), 7471, requires certain specified “major emitting facilit[ies],” such as iron and steel mills, to obtain state-issued construction permits if they have the potential to emit over 100 tons per year (tpy) of “any air pollutant,” and all other sources to obtain such permits if they have the potential to emit over 250 tpy, *id.* §§ 7475, 7479(1). Under the PSD program, sources need permits before starting a construction or modification project. *See id.* §§ 7411(a)(4), 7475, 7479(2)(C). To obtain a PSD permit, covered sources must install the “best available control technology” (BACT) for all regulated air pollutants—even for air pollutants whose emissions levels are insufficient to trigger the PSD permitting requirement. *Id.* § 7475(a)(4). In other words, if a source emits two regulated air pollutants—say sulfur dioxide and particulate matter—but triggers the PSD permitting requirement only because it emits 500 tpy of sulfur dioxide, it must install BACT for both. The Title V program requires *operational* permits for stationary sources that have the potential to emit at least 100 tpy of any regulated air pollutant. *See id.* §§ 7661–7661f.

In response to the Supreme Court's decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), EPA published an Endangerment Finding for greenhouse gases—a “well-mixed” and “aggregate” group of six gases, including carbon dioxide (CO₂). *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (“Endangerment Finding”), 74 Fed. Reg. 66,496, 66,499 (Dec. 15, 2009). Based on that finding, EPA issued a “cascading series of greenhouse gas-related rules and regulations.” *Coalition for Responsible Regulation*, 684 F.3d at 114. Partnering with the National Highway Traffic Safety Administration, EPA first promulgated the Tailpipe Rule, which established motor-vehicle emissions standards for greenhouse gases. *See Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule*, 75 Fed. Reg. 25,324 (May 7, 2010). Because the “Tailpipe Rule automatically triggered regulation of stationary greenhouse gas emitters under” the PSD and Title V permitting programs, EPA then issued two rules “phasing in stationary source greenhouse gas regulation.” *Coalition for Responsible Regulation*, 684 F.3d at 115. In the Timing Rule, EPA concluded that major stationary emitters of greenhouse gases became subject to the PSD and Title V permitting requirements on January 2, 2011—the same date greenhouse gases were subjected to regulation under the Tailpipe Rule. *See Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs*, 75 Fed. Reg. 17,004, 17,007 (Apr. 2, 2010). And in the Tailoring Rule, EPA, recognizing that literal application of the PSD and Title V emissions thresholds would cover millions of sources, “tailored” the statutory thresholds to “reliev[e] [the] overwhelming permitting burden[] that would . . . fall on permitting authorities and sources.” *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule*

(“Tailoring Rule”), 75 Fed. Reg. 31,514, 31,516 (June 3, 2010). The Tailoring Rule staggers the applicability of the PSD and Title V permitting programs, “starting with the largest [greenhouse gas] emitters.” *Id.* at 31,514. Under Step One of the Tailoring Rule, which became effective January 2, 2011, the PSD and Title V permitting programs apply only to “ ‘anyway’ PSD [and Title V] sources, that is, sources that are subject to PSD [and Title V] anyway due to their emissions of conventional pollutants,” i.e., non-greenhouse-gas pollutants. *Id.* at 31,567. Under Step Two of the Tailoring Rule, which became effective six months later, the PSD and Title V permitting programs apply to sources with the potential to emit specified amounts of greenhouse gases. *See id.* at 31,516. In *Coalition for Responsible Regulation, Inc. v. EPA*, this court upheld the Endangerment Finding and Tailpipe Rule as neither arbitrary nor capricious, concluded that the PSD and Title V permitting programs were unambiguously triggered when EPA issued the Tailpipe Rule, and rejected challenges to the Timing and Tailoring Rules on standing grounds. *See Coalition for Responsible Regulation*, 684 F.3d at 113–14.

This case involves biogenic carbon dioxide emissions, which EPA defines as carbon dioxide emissions “directly resulting from the combustion or decomposition of biologically-based materials other than fossil fuels and mineral sources of carbon.” *Deferral for CO₂ Emissions from Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration (PSD) and Title V Programs* (“Deferral Rule”), 76 Fed. Reg. 43,490, 43,493 (July 20, 2011). Biogenic carbon dioxide emissions are generated from, among other things, “the biological decomposition of waste in landfills, wastewater treatment[,] or manure management processes,” “fermentation during ethanol production,” and the “combustion of biological material, including all types of wood and wood waste, forest residue, and agricultural

material.” *Id.* To use a familiar example, power plants running on coal emit fossil-fuel carbon dioxide whereas power plants burning feedstocks emit biogenic carbon dioxide.

Unlike fossil fuels that emit greenhouse gases only through human-induced combustion, biogenic sources emit carbon dioxide via both natural and anthropogenic processes. A forest fire, for example, will emit biogenic carbon dioxide regardless of whether it was sparked by lightning or as part of a clear-cutting operation. Dead trees emit carbon dioxide as part of the decomposition process. *See Deferral for CO₂ Emissions From Bioenergy and Other Biogenic Sources Under the Prevention of Significant Deterioration (PSD) and Title V Programs: Proposed Rule* (“Proposed Deferral Rule”), 76 Fed. Reg. 15,249, 15,252–54 (Mar. 21, 2011).

Significantly for the issue before us, biogenic carbon dioxide has a “unique role and impact . . . in the carbon cycle.” Deferral Rule, 76 Fed. Reg. at 43,496. “Through relatively rapid photosynthesis, plants absorb CO₂ from the atmosphere and add it to their biomass, which contains roughly 50% carbon by weight, through a process called sequestration.” Proposed Deferral Rule, 76 Fed. Reg. at 15,252. Carbon dioxide emitted by fossil-fuel combustion is reabsorbed over millennia, leading to a long carbon “debt” period. By contrast, carbon dioxide released by biogenic sources will be sequestered when new plants are grown. The extent to which biogenic sources can serve as a carbon “sink” will depend on the type of source and its life cycle. *See id.* at 15,252–54. Given biogenic carbon dioxide’s role in the carbon cycle, many state and federal programs treat biofuels as “renewable resources and promote bioenergy projects when they are a way to address climate change.” Deferral Rule, 76 Fed. Reg. at 43,492. But to be clear, once carbon dioxide is released into the atmosphere, “it is not possible to

distinguish between the radiative forcing associated with a molecule of CO₂ originating from a biogenic source and one originating from the combustion of fossil fuel.” Proposed Deferral Rule, 76 Fed. Reg. at 15,254. In layman’s terms, the atmosphere makes no distinction between carbon dioxide emitted by biogenic and fossil-fuel sources.

In the Tailoring Rule, EPA acknowledged that “biomass or biogenic fuels and feedstocks could play [a role] in reducing anthropogenic [greenhouse gas] emissions.” Tailoring Rule, 75 Fed. Reg. at 31,590–91. Yet responding to numerous requests that the Tailoring Rule exempt biogenic carbon dioxide emissions, EPA stated that because it “ha[d] not analyzed the administrative burden of permitting projects that specifically involve biogenic CO₂ emissions,” it would not take a “final position” on whether an exemption or “different treatment of biomass combustion” was warranted. *Id.* at 31,591. As a result, the Timing and Tailoring Rules require biogenic carbon dioxide sources to obtain PSD and Title V permits.

Shortly after promulgating the Tailoring Rule, EPA issued a Call for Information seeking technical and scientific information to “evaluat[e] different accounting approaches” for measuring biogenic carbon dioxide emissions. *Call for Information: Information on Greenhouse Gas Emissions Associated with Bioenergy an Other Biogenic Sources*, 75 Fed. Reg. 41,173, 41,174 (July 15, 2010). Specifically, EPA sought information about how to treat biogenic carbon dioxide sources differently for purposes of measuring the emissions that trigger the PSD and Title V permitting programs. For example, EPA requested comments on how to “determin[e] the net impact on the atmosphere of CO₂ emissions” and the “appropriate spatial/geographic scale for conducting this determination.” *Id.* at 41,176. Then in March

2011, EPA, citing its ongoing efforts to understand the unique characteristics of biogenic carbon dioxide, issued a notice of proposed rulemaking seeking comment on whether it should defer regulation of these sources for a three-year period. *See* Proposed Deferral Rule, 76 Fed. Reg. at 15,251. Simultaneously, it published a guidance document for determining BACT for biogenic carbon dioxide emissions from “anyway” sources that were regulated under the PSD permitting program at Step One of the Tailoring Rule. *See* Office of Air and Radiation, U.S. EPA, Guidance for Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production (Mar. 2011).

Based on comments and studies received during the notice-and-comment period, and following up on the Call for Information, EPA issued a rule—the one challenged here—postponing regulation of biogenic carbon dioxide sources for three years. In support of this so-called Deferral Rule, EPA repeatedly emphasized that “the issue of accounting for the net atmospheric impact of biogenic CO₂ emissions is complex enough that further consideration . . . is warranted.” Deferral Rule, 76 Fed. Reg. at 43,492. It explained:

The information collected to this point underscores the complexity and uncertainty associated with accounting for biogenic emissions of CO₂ and indicates that at present attempting to determine the net carbon cycle impact of particular facilities combusting particular types of biomass feedstocks would require extensive analysis and would therefore entail extensive workload requirements by many of the permitting authorities. In contrast to other sources of [greenhouse gas] emissions, these uncertainties and complexities are exacerbated

because of the unique role and impact biogenic sources of CO₂ have in the carbon cycle. Further, methodologies are not sufficiently developed to assure that various permitting authorities would be able to perform the necessary calculations reasonably and consistently to determine the net atmospheric impact in many, if not all, instances.

Id. at 43,496. To dispel these uncertainties, EPA announced that “[d]uring the three-year deferral period” it would “conduct a detailed examination of the science associated with biogenic CO₂ emissions from stationary sources.” *Id.* at 43,492. EPA justified the Deferral Rule by invoking three principles of administrative law: the *de minimis*, one-step-at-a-time, and administrative necessity doctrines. *See id.* at 43,496–99. For instance, EPA reasoned that it would be a waste of resources to regulate a biogenic carbon dioxide source that has a *de minimis* impact on the net carbon cycle. *See id.* at 43,499.

The Deferral Rule exempts from regulation biogenic carbon dioxide sources that trigger the PSD and Title V permitting programs at Step Two of the Tailoring Rule. The rule accomplishes this by amending the regulatory definition of “greenhouse gases” to exclude biogenic carbon dioxide. Thus, biogenic carbon dioxide sources that have the potential to emit over the statutory thresholds, as modified by the Tailoring Rule, need not obtain a PSD or Title V permit. *See id.* at 43,493. The so-called “anyway” sources that obtained PSD and Title V permits during Step One of the Tailoring Rule, however, must still install BACT for their biogenic carbon dioxide emissions. *See id.* at 43,500–01.

The Deferral Rule contains a sunset provision: absent further agency action, on July 21, 2014, biogenic carbon

dioxide will be regulated under the PSD and Title V programs, as modified by the Tailoring Rule. *See id.* at 43,490, 43,507. Although the Deferral Rule is a temporary regulation, it functions, in effect, as a permanent exemption from the PSD permitting requirement for any biogenic carbon dioxide source constructed during the three-year deferral period. *See id.* at 43,499. Exempted sources would have to obtain PSD permits only if they undertake a modification project after the deferral period ends. *See id.* The Deferral Rule is also voluntary. “Each state may decide if it wishes to adopt the deferral and proceed accordingly.” *Id.* at 43,502. At least one State, Massachusetts, is currently regulating biogenic carbon dioxide sources at Step Two of the Tailoring Rule. *See Oral Arg. Tr.* 3–4.

Center for Biological Diversity and several other environmental organizations now petition for review. “We review the actions of the EPA to determine whether they are ‘(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (B) contrary to constitutional right, power, privilege, or immunity; [or] (C) in excess of statutory jurisdiction, authority, or limitations.’ ” *American Farm Bureau Federation v. EPA*, 559 F.3d 512, 519 (D.C. Cir. 2009) (per curiam) (quoting 42 U.S.C. § 7607(d)(9)) (alternation in original).

II.

Before considering the merits of petitioners’ challenge, we must determine whether this case is ripe for review. *See In re Aiken County*, 645 F.3d 428, 434 (D.C. Cir. 2011) (explaining that the “ripeness doctrine, even in its prudential aspect, is a threshold inquiry”). Under the prudential ripeness doctrine, invoked by our dissenting colleague, *see* dissenting op. at 10–17, courts look at two factors in deciding whether to stay their hand: the “fitness of the issues for judicial decision”

and “the extent to which withholding a decision will cause hardship to the parties.” *American Petroleum Institute v. EPA*, 683 F.3d 382, 387 (D.C. Cir. 2012) (internal quotation marks omitted).

The Deferral Rule satisfies the first factor because it functions as an exemption from the PSD permit requirement for those sources constructed during the deferral period. *See supra* at 10; Oral Arg. Tr. 13 (EPA conceding that the Deferral Rule permanently exempts sources constructed between July 2011 and July 2014). To be sure, once the deferral period ends, these sources’ “biogenic CO₂ emissions would have to be appropriately considered in any applicability determinations . . . conduct[ed] for *future* stationary source permitting purposes.” Deferral Rule, 76 Fed. Reg. at 43,499 (emphasis added). But under the PSD program, a source would be required to obtain a permit only for “a major modification determination.” *Id.* Given this, the question before us is whether EPA may exempt certain biogenic carbon dioxide *sources*—not just the air pollutant itself—from the PSD program. This is the type of “purely legal” and “sufficiently final” issue that is “fit[] . . . for judicial decision” and can be resolved without resort to the prudential ripeness doctrine. *American Petroleum Institute*, 683 F.3d at 387 (internal quotation marks omitted).

Regarding the second factor, the parties will suffer hardship if we decline to decide this issue. We know from oral argument that a biogenic carbon dioxide source in Allendale, South Carolina, has been constructed without a PSD permit, meaning that it has emitted more pollution than it otherwise would have but for the Deferral Rule. *See* Oral Arg. Tr. 5–6, 10. There may well be other such sources. Our dissenting colleague principally relies on a March 2012 declaration for the proposition that the number of sources

impacted by the Deferral Rule is negligible. But we have no idea how many biogenic carbon dioxide sources have been constructed since March 2012, nor do we have any basis for predicting how many biogenic carbon dioxide sources will be constructed during the next year. Because the Deferral Rule authorizes certain sources to emit more pollutants than they would otherwise be allowed to under the Tailoring Rule, this dispute is ripe for review.

III.

Petitioners argue that the Deferral Rule violates the Clean Air Act's plain language. They rely on the statute's definition of "major emitting facility": any "stationary source[]" that "emit[s], or ha[s] the potential to emit," certain specified amounts of "any air pollutant." 42 U.S.C. § 7479(1). Because EPA regulates carbon dioxide as an "air pollutant," petitioners contend that the agency has no authority to exempt any sources of carbon dioxide, including biogenic sources, from the PSD permitting program. Acknowledging the scientific uncertainty about biogenic carbon dioxide's role in the carbon cycle, petitioners argue that EPA can regulate biogenic sources under the PSD permitting program while accounting for their unique qualities at the BACT stage. For its part, EPA believes that it has authority under the Clean Air Act to treat biogenic carbon dioxide sources differently because these sources have unique characteristics that were "unquestionably unforeseen when Congress enacted [the] PSD" program. Respondent's Br. 40. This statutory analysis, however, appears nowhere in the Deferral Rule. Instead, the Deferral Rule rests on the *de minimis*, one-step-at-a-time, and administrative necessity doctrines. Because the "grounds upon which an administrative order must be judged are those upon which the record discloses that its action was based," *SEC v. Chenery Corp.*, 318 U.S. 80, 87 (1943), the Deferral

Rule must stand or fall on the merits of EPA's invocation of these doctrines.

We can easily reject EPA's use of the *de minimis* doctrine, which allows agencies to grant regulatory "exemption[s] when the burdens of regulation yield a gain of trivial or no value." *Alabama Power Co. v. Costle*, 636 F.2d 323, 360–61 (D.C. Cir. 1979). In the Deferral Rule, EPA stated that it had authority to exempt biogenic carbon dioxide sources that have "a negligible or positive impact on the carbon cycle and net atmospheric CO₂ levels." Deferral Rule, 76 Fed. Reg. at 43,499. In its appellate brief, however, EPA expressly disavows this doctrine, explaining that the Deferral Rule has a three-year sunset provision whereas the *de minimis* doctrine "is used to establish *permanent* exemptions." Respondent's Br. 35. Given this concession, the Deferral Rule cannot be sustained under the *de minimis* doctrine.

The one-step-at-a-time doctrine, which EPA does defend, authorizes agencies to promulgate regulations in a piecemeal fashion. EPA explains that it is proceeding one-step-at-a-time—that is, postponing regulation of biogenic carbon dioxide for three years—in order to give it time to study the science underlying these sources and determine its precise regulatory approach. See Deferral Rule, 76 Fed. Reg. at 43,497 ("EPA has . . . deferr[ed] the applicability of PSD and Title V to biogenic emissions of CO₂ from stationary sources for only as long as necessary for EPA to complete the needed scientific study of these emissions, develop an accounting framework, and as appropriate conduct rulemaking specific to the unique nature and characteristics of these emission sources."). According to petitioners, however, federal agencies have no authority to invoke the one-step-at-a-time doctrine "to diverge from [a] clear statutory mandate," and here, they argue, the Clean Air Act unambiguously requires

regulation of all carbon dioxide from whatever source. Petitioners' Br. 56. But we need not decide whether the one-step-at-a-time doctrine can justify an agency's non-compliance with a clear statutory mandate or whether the Clean Air Act unambiguously requires the regulation of all carbon dioxide from whatever source because, as we shall explain, EPA's invocation of the one-step-at-a-time doctrine was arbitrary and capricious. *See Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 477 (D.C. Cir. 1998) (determining whether agency's reliance on the one-step-at-a-time doctrine was arbitrary and capricious).

The one-step-at-a-time doctrine rests on the notion that "[s]ince agencies have great discretion to treat a problem partially, we [sh]ould not strike down [a regulation] if it [is] a first step toward a complete solution." *City of Las Vegas v. Lujan*, 891 F.2d 927, 935 (D.C. Cir. 1989). Eschewing a precise doctrinal test for invoking the doctrine, we have remarked that the one-step-at-a-time inquiry "is in essence a pragmatic one." *National Association of Broadcasters v. FCC*, 740 F.2d 1190, 1210 (D.C. Cir. 1984). We have observed that incremental regulation is especially appropriate in response to evolving economic and technological conditions. *See id.* at 1210–11. We have also imposed outer limits on the one-step-at-a-time doctrine: "it would be arbitrary and capricious for an agency simply to thumb its nose at Congress and say—without any explanation—that it simply does not intend to achieve a congressional goal on any timetable at all." *Grand Canyon Air Tour Coalition*, 154 F.3d at 477. Although the "circumstances under which [an] agency may defer [regulation] . . . are [in]capable of being captured in a single doctrine," *National Association of Broadcasters*, 740 F.2d at 1210, an agency invoking the one-step-at-a-time doctrine must, at a minimum, articulate (1) what it believes the statute requires and (2) how it intends to achieve that goal.

Otherwise, reviewing courts will have no basis for evaluating whether the agency is in fact taking “a first step toward a complete solution.” *City of Las Vegas*, 891 F.2d at 935. EPA itself put it well: “Courts will accept an initial step towards full compliance with a statutory mandate, as long as the agency is headed towards full compliance.” Deferral Rule, 76 Fed. Reg. at 43,498.

In this case, however, EPA failed to explain in the Deferral Rule what “full compliance” with the “statutory mandate” means. Specifically, although the Deferral Rule spends pages explaining the scientific uncertainty about biogenic carbon dioxide sources, the additional research EPA plans to undertake, and why three more years of study are warranted, the rule—as opposed to EPA’s brief here—nowhere offers an interpretation of the Clean Air Act that would allow the agency to treat biogenic carbon dioxide sources differently. This deficiency is not merely the result of scientific uncertainty. For example, this would be a very different case had the Deferral Rule interpreted the Clean Air Act as requiring permits only for biogenic carbon dioxide sources with an adverse impact on the net carbon cycle and explained that the agency had deferred regulation due to scientific uncertainty over which sources meet that standard. Under those circumstances, we could have determined whether EPA had correctly interpreted the statute and properly invoked the one-step-at-a-time doctrine. Here, by contrast, we simply have no idea what EPA believes constitutes “full compliance” with the statute. In other words, the Deferral Rule is one step towards . . . what? Without a clear answer to that question, EPA has no basis for invoking the one-step-at-a-time doctrine.

EPA next invokes the administrative necessity doctrine, which permits an agency to “avoid implementing a statute . . .

by showing that attainment of the statutory objectives is impossible.” *Sierra Club v. EPA*, 719 F.2d 436, 463 (D.C. Cir. 1983). Under this doctrine, the agency must also adopt the narrowest feasible exemption. *See id.* (criticizing the agency for failing to explore “less taxing ways to enforce the law”).

Emphasizing both the possibility that biogenic carbon dioxide sources might have a negligible impact on the net carbon cycle and the “extensive workload of processing permit applications,” EPA found that requiring permits for these sources “would frustrate the goals . . . sought to [be] accomplish[ed] in the Tailoring Rule.” Deferral Rule, 76 Fed. Reg. at 43,496. In doing so, EPA rejected a proposed middle-ground option: requiring biogenic carbon dioxide sources to obtain permits but only if they fail to make “any effort to take into account net carbon cycle impacts.” *Id.* Under this approach, all biogenic carbon dioxide sources that would have triggered the modified statutory thresholds would have had to take some steps to reduce their emissions, either voluntarily to avoid the PSD permit requirement or by installing BACT as a condition of obtaining a permit. EPA rejected this approach because it “could result in regulation of sources with trivial or positive impacts on the net carbon cycle.” *Id.*

Without deciding whether the middle-ground option could pass muster under the statute, we agree with petitioners that EPA’s rejection of that option was arbitrary and capricious. EPA has conceded “the possibility . . . that more detailed examination of the science of biogenic CO₂ will demonstrate that . . . some biogenic feedstocks . . . have a *significant impact* on the net carbon cycle.” *Id.* at 43,498 (emphasis added). As to these sources, the middle-ground option would have had the practical effect of reducing their emissions; by contrast, the Deferral Rule, which functions as

a permanent exemption, does not. EPA's reason for rejecting the middle-ground option—that it would regulate biogenic sources with a trivial impact—though perhaps accurate, is thus non-responsive. Given EPA's obligation to adopt the narrowest exemption possible, it should have explained why it rejected an option that would have reduced emissions from sources the Deferral Rule permanently exempts. *See Sierra Club*, 719 F.2d at 464 (remanding regulation because there was “no evidence that EPA ha[d] adequately explored . . . regulatory alternatives”).

This omission is especially troublesome because EPA has demonstrated that, notwithstanding the scientific uncertainty about measuring biogenic carbon dioxide emissions at the PSD applicability stage, the unique characteristics of these sources can be factored in at the BACT stage. The Deferral Rule still requires “anyway” sources that obtained PSD permits under Step One of the Tailoring Rule to regulate biogenic carbon dioxide emissions. To assist those sources and permitting authorities in developing BACT standards, EPA issued a detailed thirty-three page report on biogenic carbon dioxide. Presumably, permitting authorities are able to handle the scientific complexity of regulating biogenic carbon dioxide as to these “anyway” sources. Furthermore, since the Deferral Rule is voluntary, States may regulate biogenic carbon dioxide sources under Step Two of the Tailoring Rule. Indeed, Massachusetts is currently doing just that.

Finally, for the first time in its brief, EPA relies on the absurd results doctrine, which embodies “the long-standing rule that a statute should not be construed to produce an absurd result.” *Mova Pharmaceutical Corp. v. Shalala*, 140 F.3d 1060, 1068 (D.C. Cir. 1998). As EPA sees it, because “emissions of CO₂ derived from certain forms of biomass may not only fail to endanger public health and welfare, but in

fact may benefit the public by reducing the net emissions of CO₂,” Respondent’s Br. 59, it would run afoul of congressional intent to regulate them. Responding to petitioners’ contention that EPA’s reliance on the absurd results doctrine is post hoc, the agency points to several passages in the Deferral Rule that mention the doctrine. These references fall into two groups. The first, and by far the larger, appears in a summary of the Tailoring Rule’s legal reasoning. According to EPA, the Deferral Rule fully incorporates the Tailoring Rule’s rationales, including the absurd results doctrine. *See* Respondent’s Br. 59. But the Deferral Rule cannot rest on the Tailoring Rule’s invocation of the absurd results doctrine for a simple reason: the two rules are aimed at different absurd results. The Tailoring Rule was intended to alleviate the crushing administrative burden on permitting authorities and sources, *see* Tailoring Rule, 75 Fed. Reg. at 31,547; the Deferral Rule, by contrast, was intended to avoid regulation of biogenic carbon dioxide sources that have a negligible impact on the net carbon cycle. The second group, which appears in a section justifying the Deferral Rule itself, mentions the absurd results doctrine only by analogy to the *de minimis* and administrative necessity doctrines. These passing references, however, fall far short of satisfying EPA’s “fundamental” obligation to “set forth the reasons for its actions.” *Northeast Maryland Waste Disposal Authority v. EPA*, 358 F.3d 936, 949 (D.C. Cir. 2004) (per curiam). For these reasons, we agree with petitioners that EPA’s reliance on the absurd results doctrine is indeed post hoc. *See Calpine Corp. v. FERC*, 702 F.3d 41, 46 (D.C. Cir. 2012) (explaining that an “agency decision[] may not be affirmed on grounds not actually relied upon by the agency”).

Because the Deferral Rule cannot be justified under any of the administrative law doctrines relied on by EPA, this opinion, contrary to our dissenting colleague’s suggestion, *see*

dissenting op. at 8, leaves for another day the question whether the agency has authority under the Clean Air Act to permanently exempt biogenic carbon dioxide sources from the PSD permitting program. If and when EPA adopts a permanent exemption for some or all biogenic carbon dioxide sources, we will have the benefit of three years of scientific study, as well as fully briefed and contextualized arguments about EPA's authority under the Clean Air Act.

IV.

For the foregoing reasons, we grant the petitions for review and vacate the Deferral Rule.

So ordered.

KAVANAUGH, *Circuit Judge*, concurring: Under this Court's recent precedent in *Coalition for Responsible Regulation, Inc. v. EPA*, this should be an easy case. The primary question presented is whether EPA has statutory authority to issue the Deferral Rule and thereby temporarily exempt biogenic carbon dioxide from the PSD and Title V permitting programs. In my view, the answer is no. This Court has ruled that the statute requires pre-construction and operating permits for stationary sources that emit or have the potential to emit certain specified amounts of an air pollutant, including carbon dioxide. There is zero basis in the text of the Clean Air Act for EPA to distinguish biogenic carbon dioxide from other sources of carbon dioxide that EPA is required (under our precedent) to regulate for purposes of the PSD and Title V permitting programs. See *Coalition for Responsible Regulation, Inc. v. EPA*, 684 F.3d 102, 132-44 (D.C. Cir. 2012).

As a policy matter, EPA may have very good reasons to temporarily exempt biogenic carbon dioxide from the PSD and Title V permitting programs. But Congress sets the policy in the statutes it enacts; EPA has discretion to act only within the statutory limits set by Congress. The statute does not give EPA the authority to distinguish a stationary source's emissions of biogenic carbon dioxide from emissions of other forms of carbon dioxide for purposes of these permitting programs.¹

EPA cites three administrative law doctrines that, according to EPA, give it authority to grant the temporary exemption. But in addition to the reasons given in Judge

¹ Under current precedent, for EPA to exempt biogenic carbon dioxide, it presumably would have to tinker with the Endangerment Finding. Unless EPA does so, there is no statutory basis for exempting biogenic carbon dioxide from the PSD and Title V permitting programs.

Tatel's opinion for the Court, which I join in full, I would say that none of those doctrines applies in this case for an even more fundamental reason: The doctrines do not trump the fact that EPA simply lacks statutory authority to distinguish biogenic carbon dioxide from other forms of carbon dioxide for purposes of the PSD and Title V permitting programs.

First, EPA relies on the one-step-at-a-time doctrine, which allows an agency to take incremental steps toward achieving a statutory mandate if taking incremental steps is consistent with the statutory text. *See Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 477-78 (D.C. Cir. 1998) (rule not arbitrary and capricious because it would achieve statutory mandate in conjunction with other proposed rules within a reasonable timeframe). An agency typically invokes that doctrine in response to a claim that an agency is exercising its statutory discretion in an arbitrary and capricious manner.

But EPA has no such statutory discretion here. Under the statute as this Court has interpreted it, EPA *must* regulate carbon dioxide under the PSD and Title V permitting programs. *Coalition for Responsible Regulation*, 684 F.3d at 144 (Clean Air Act “requires PSD and Title V permits for major emitters of greenhouse gases”). And there is no basis in the statute for distinguishing biogenic carbon dioxide from other forms of carbon dioxide.

Second, EPA cites the administrative necessity doctrine, which can excuse agency non-compliance with a statute if the agency lacks sufficient funds or resources. *See Alabama Power Co. v. Costle*, 636 F.2d 323, 359 (D.C. Cir. 1979) (shortage of funds, of “time, or of the technical personnel needed to administer a program” grants agency authority “to cope with the administrative impossibility of applying the

commands of the substantive statute”). But EPA has the funds and resources to apply the PSD and Title V programs to biogenic carbon dioxide. Indeed, in the Deferral Rule, EPA acknowledged that it has the resources to “apply PSD and Title V to all facilities with biogenic CO₂ emissions that emit at or above the Tailoring Rule thresholds.” 76 Fed. Reg. 43,490, 43,496 (July 20, 2011).

EPA decided against that option, however, because EPA thought it might be bad policy. Specifically, EPA said that “it is conceivable that as a result of the scientific examination of biogenic CO₂ emissions, [EPA] could conclude that the net carbon cycle impact for some biomass feedstocks is trivial, negative, or positive.” *Id.* EPA reached that conclusion because it thinks that regrowth of plant life – and the resulting recapture of carbon dioxide – might “offset” emissions of biogenic carbon dioxide. But the statute forecloses that kind of “offsetting” approach because the statute measures emissions from stationary sources that “emit” (or have the potential to emit) air pollutants. *See* 42 U.S.C. §§ 7475(a), 7479(1). The statute does not allow EPA to exempt those sources’ emissions of a covered air pollutant just because the effects of those sources’ emissions on the atmosphere might be offset in some other way.

Relatedly, EPA suggests that it has appropriately balanced the costs and benefits of regulating biogenic carbon dioxide under the PSD and Title V programs. But EPA is not permitted to substitute its view of the costs and benefits of regulation for Congress’s view of the costs and benefits of regulation. *See Sierra Club v. EPA*, 719 F.2d 436, 462 (D.C. Cir. 1983) (EPA not permitted to create exemption “based upon its perceptions of the costs and benefits of enforcing the law”); *Alabama Power Co.*, 636 F.2d at 357 (“[T]here exists no general administrative power to create exemptions to

statutory requirements based upon the agency's perceptions of costs and benefits."). Allowing an agency to substitute its own policy choices for Congress's policy choices in this manner would undermine core separation of powers principles. The Constitution gives Congress the legislative power to set policy in the first instance, and agencies then must act within those statutory boundaries – even if the agency believes it possesses expertise or policy views superior to Congress's. See *Federal Power Commission v. Texaco*, 417 U.S. 380, 400 (1974) (agencies cannot use administrative necessity "to overturn congressional assumptions embedded into the framework of regulation" by Congress); *Natural Resources Defense Council, Inc. v. Costle*, 568 F.2d 1369, 1377 (D.C. Cir. 1977) (doctrine not a "revisory power" granting agency authority to act "inconsistent with the clear intent of the relevant statute").

Third, EPA has also invoked the absurd results doctrine. The crux of EPA's position is that it would be absurd to interpret the Clean Air Act in a way that would require EPA to regulate biogenic carbon dioxide. But with EPA having already applied the PSD and Title V programs to carbon dioxide (and with this Court having agreed with that interpretation of the statute), there is certainly nothing absurd about applying those programs to *biogenic* carbon dioxide. It is hardly absurd for Congress to tackle the problem of emissions from the smokestack in the first instance. And the fact that an exemption for biogenic carbon dioxide would be better policy (in EPA's view) does not make it absurd to apply the statute to biogenic carbon dioxide. See *Landstar Express America, Inc. v. Federal Maritime Commission*, 569 F.3d 493, 498 (D.C. Cir. 2009) ("A statutory outcome is absurd if it defies rationality."). If it would be better overall

to exempt biogenic carbon dioxide from these permitting programs, EPA can always recommend that Congress do so.²

* * *

All of that said, I have mixed feelings about this case. That's because I believe, contrary to this Circuit's precedent, that the PSD statute does not cover carbon dioxide, whether biogenic or not. *See Coalition for Responsible Regulation, Inc. v. EPA*, No. 09-1322 (D.C. Cir. 2012) (Kavanaugh, J., dissenting from denial of rehearing en banc). And as I see it, EPA's decision to temporarily exempt biogenic carbon dioxide from regulation simply highlights the legal problems in applying the PSD program to greenhouse gases, including carbon dioxide, in the first place. To review the bidding: EPA has read the PSD statute broadly to cover not just the NAAQS pollutants but also greenhouse gases, although EPA

² To be sure, the Executive may decline to follow a statutory mandate or prohibition applicable to the Executive if the President concludes that it is unconstitutional, unless and until a final Court order says otherwise. But EPA has not claimed that the statutory requirement to apply these permitting programs to biogenic carbon dioxide would be unconstitutional. It is also true that the Executive possesses a significant degree of prosecutorial discretion to decline to initiate criminal or civil enforcement actions against violators of a federal law. But EPA's decision here is not such a non-enforcement action, and EPA has not claimed otherwise. *See Massachusetts v. EPA*, 549 U.S. 497, 527-28, 533 (2007) (explaining difference between prosecutorial discretion and agency's choice whether to regulate); *see generally In re Aiken County*, No. 11-1271, slip op. at 2 n.1 (D.C. Cir. 2012) (Kavanaugh, J., concurring) (describing prosecutorial discretion); *Seven-Sky v. Holder*, 661 F.3d 1, 50 n.43 (D.C. Cir. 2011) (Kavanaugh, J., dissenting) (referring to possibility that a President might exercise prosecutorial discretion not to seek civil penalties against those who fail to comply with health insurance mandate).

expressly recognized that such an interpretation would lead to a result that was “so contrary to what Congress had in mind” and “in fact so undermines what Congress attempted to accomplish with the PSD requirements” that “it should be avoided under the ‘absurd results’ doctrine.” 74 Fed. Reg. 55,292, 55,310 (Oct. 27, 2009). To try to deal with those admittedly absurd results, EPA then has repeatedly re-written the statute – first in the Tailoring Rule and now in the Deferral Rule. But the absurdities and anomalies flowing from EPA’s statutory interpretation just underscore how flawed EPA’s interpretation was from the get-go. EPA could have adopted a narrower interpretation of the PSD statute that would have avoided those absurdities and, to boot, would have been more consistent with the statutory text and structure. What we are left with now is a statute that is a far cry from what Congress intended or enacted. So EPA is necessarily making it up as it goes along. That is not how the administrative process is supposed to work.

In saying that, I do not want to diminish EPA’s vital public objectives in addressing global warming. The task of dealing with global warming is urgent and important at the national and international level. My concern about EPA’s approach does not stem from policy beliefs (courts don’t have the authority or the expertise to assess policy well anyway) but rather from separation of powers principles.

But EPA’s broad interpretation of the statute was upheld by this Court in *Coalition for Responsible Regulation*. Although I respectfully think the case was wrongly decided on this issue, that’s water over the dam in this Court. We are bound to apply that precedent. Under that case’s interpretation of the governing statute, EPA is required to regulate carbon dioxide under the PSD and Title V permitting

programs. There is no statutory basis for exempting biogenic carbon dioxide.

KAREN LECRAFT HENDERSON, *Circuit Judge*, dissenting:

We must decide whether the Environmental Protection Agency (EPA) may temporarily defer regulation of biogenic carbon dioxide (CO₂) emissions against a backdrop of uncertain but expanding scientific knowledge and rapid regulatory changes. Deferral for CO₂ Emissions from Bioenergy, 76 Fed. Reg. 43,490 (July 20, 2011) (Deferral Rule). I believe EPA can—and should—defer regulation until it has the time it says it needs to study and resolve the issue it is charged with regulating. I would therefore uphold the Deferral Rule. Alternatively, given that the Deferral Rule expires or will be superseded in a matter of months—and by then EPA will have at least crystallized the issue before us—we should hold the case in abeyance as unripe. Accordingly, I respectfully dissent.

I.

The Deferral Rule delays for three years—from July 20, 2011 until July 21, 2014—the EPA’s factoring in of biogenic CO₂ emissions “when determining whether a stationary source meets the” emissions thresholds for permitting under the Prevention of Significant Deterioration (PSD) and Title V permitting systems of the Clean Air Act (CAA), 42 U.S.C. §§ 7401 *et seq.* See Deferral Rule, 76 Fed. Reg. at 43,492. In so deferring, EPA has used, correctly, I believe, the long-recognized step-at-a-time regulatory procedure. This procedure recognizes the reality and complexity of administrative regulation. “In an ideal world . . . agencies would act only after comprehensive consideration of how all available alternatives comported with a well-defined policy objective . . .” *Nat’l Ass’n of Broadcasters v. FCC*, 740 F.2d 1190, 1210 (D.C. Cir. 1984). Nonetheless, “administrative action generally occurs against a shifting background in which facts, predictions, and policies are in flux and in which an agency would be paralyzed if all the necessary answers had to be in before any action at all could be taken.” *Id.* Thus,

“agencies have great discretion to treat a problem partially” and we will “not strike down [a regulation] if it [is] a first step toward a complete solution, even if we thought it ‘should’ ” have been finished. *City of Las Vegas v. Lujan*, 891 F.2d 927, 935 (D.C. Cir. 1989). Moreover, “nothing in the [Administrative Procedure Act] precludes an agency from collecting data and monitoring real-world experience with regulatory standards before adopting new standards governing periods of time far into the future—especially in cases, as here, that involve unpredictable technological change. Indeed, gathering evidence *before* making a long-term decision is eminently sensible.” *Pub. Citizen, Inc. v. Nat’l Highway Traffic Safety Admin.*, 374 F.3d 1251, 1263 (D.C. Cir. 2004); *see also id.* at 1262-63 (agency’s temporarily declining to make crash test requirements stricter was not arbitrary and capricious because it “offered rational reasons for adopting an ‘interim final rule’ establishing the unbelted crash test speed through August 2006 only” while it undertook “multi-year effort to obtain additional data”).

The Deferral Rule must be read in light of the fact that EPA did not regulate greenhouse gases (GHGs) under the CAA *at all* until the end of 2009, *see* Endangerment and Cause or Contribute Findings for Greenhouse Gases, 74 Fed. Reg. 66,496 (Dec. 15, 2009), and did not regulate them under PSD and Title V until 2011, *see* Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514, 31,521 (June 3, 2010) (Tailoring Rule). By postponing regulation of biogenic CO₂ emissions under PSD and Title V, the Deferral Rule simply keeps in place the pre-

2011 status quo. The question, then, is whether the petitioners can compel EPA to act before July 21, 2014.¹

Although the step-at-a-time doctrine is “pragmatic” and cannot be “captured in a single doctrinal formulation,” we ask two questions when an agency uses it to “defer resolution of problems.” *Nat’l Ass’n of Broadcasters*, 740 F.2d at 1210. First, we ask whether the agency (1) has “made some estimation, based upon evolving economic and technological conditions, as to the nature and magnitude of the problem it will have to confront when it comes to resolve the postponed issue”; and (2) “whether it was reasonable, in the context of the decisions made in the proceeding under review, for the agency to have deferred the issue.” *Id.* at 1210-11. Regarding the second question, “postponement will be most easily justified when an agency acts against a background of rapid technical and social change and when the agency’s initial decision as a practical matter is reversible should the future proceedings yield drastically unexpected results.” *Id.* at 1211; *see also Massachusetts v. EPA*, 549 U.S. 497, 527 (2007) (“[A]n agency has broad discretion to choose how best to marshal its limited resources and personnel to carry out its

¹ Our review is highly deferential. *See Interstate Natural Gas Ass’n of Am. v. FERC*, 285 F.3d 18, 57 (D.C. Cir. 2002) (“The policy originates in past decisions; FERC did not here decide to continue it, in the sense of confronting the substance and making an affirmative decision; it decided only that it would defer substantive treatment to a different—and necessarily later—context. In essence, then, the claim is of a violation of the [Administrative Procedure Act]’s mandate that an agency decide matters within a reasonable time, and calls on us to compel agency action unlawfully withheld or unreasonably delayed. Our review is [therefore] highly deferential.” (quotation marks and citations omitted)).

delegated responsibilities.”). I believe EPA’s rationale for the Deferral Rule easily fits within this framework.

EPA has reasonably attempted to balance its acknowledged CAA duty to regulate GHGs with the reality that both EPA itself as well as other permitting authorities have limited resources and experience in this area. The Tailoring Rule, which EPA promulgated in 2010, created a phase-in process whereby, at first, only the largest GHG emitters would be subject to PSD and Title V on the basis of GHG emissions. Tailoring Rule, 75 Fed. Reg. at 31,516. The phase-in was necessary both to alleviate high costs to permitting authorities, *id.* at 31,533, and to give EPA time to decide how to permanently implement GHG regulation, *id.* at 31,526. EPA promulgated the Deferral Rule because of similar cost and scientific uncertainty. Specifically, EPA did not know in 2011 which, if any, biofuel feedstocks cause a net increase in atmospheric CO₂ levels when used as fuel for a stationary source. Deferral Rule, 76 Fed. Reg. at 43,492. EPA was concerned that, if it regulated all sources’ biogenic CO₂ emissions without taking net increase *vel non* into account, its regulation of the sources could result in high cost but negligible benefit.² EPA also concluded that immediate, one-

² Earlier, EPA had predicted that, had it not adopted the Tailoring Rule’s phase-in approach, permitting authorities would have faced a 140-fold increase in PSD permitting activity, or \$1.5 billion in additional annual costs; and a 400-fold increase in Title V permitting activity, or \$21 billion in additional annual costs. Tailoring Rule, 75 Fed. Reg. at 31,539-40. Even under the phase-in approach, EPA projected a 42% increase in administrative costs per year. *Id.* at 31,540, Table V-1. In the Deferral Rule, EPA reasoned that “requiring regulation of biogenic sources of CO₂ at this time may,” *inter alia*, “exacerbate[] the regulatory burdens . . . the Tailoring Rule was intended to avoid.” Deferral Rule, 76 Fed. Reg. at 43,499.

size-fits-all regulation of biogenic CO₂ could be counterproductive by discouraging the construction of low-net-carbon stationary facilities. *Id.* at 43,496. Absent deferral, EPA concluded, permitting authorities—primarily, states—would face a heavy administrative burden due to, *inter alia*, the need to take the carbon cycle into account in determining best available control technology (BACT) during the permitting process. *See id.* at 43,492; *see also id.* at 43,496 (“[T]he extensive workload associated with analyzing and accounting for biogenic CO₂ emissions as part of processing permit applications from biomass facilities justifies exempting those sources for a period of time”). While EPA attempted to alleviate the administrative burden by promulgating interim guidance to help permitting authorities conduct BACT analysis for biogenic CO₂ emissions—explaining that in some instances, combustion of biomass can be considered BACT—the case-by-case analysis that permitting authorities, without the Deferral Rule, would be required to undertake immediately “would likely be prohibitively time-consuming and complex.” EPA Office of Air & Radiation, *Guidance for Determining Best Available Control Technology for Reducing Carbon Dioxide Emissions from Bioenergy Production* 23 (Mar. 2011), <http://www.epa.gov/nsr/ghgdocs/bioenergyguidance.pdf>. Accordingly, EPA promulgated the Deferral Rule as an “initial step toward full compliance” with the statutory mandate to regulate GHGs. Deferral Rule, 76 Fed. Reg. at 43,498. The Deferral Rule expires on July 21, 2014, at which time biogenic CO₂ emissions will automatically be treated like all other CO₂ emissions unless, on or before that date, EPA “undertake[s] additional rulemaking to clarify the applicability of PSD and Title V permitting requirements.” *Id.* (citing *Grand Canyon Air Tour Coalition v. FAA*, 154 F.3d 455, 476-77 (D.C. Cir. 1998)); *see also id.* at 43,494 (quoting *Massachusetts*, 549 U.S. at 524 (agencies may implement regulatory programs

over time, “refining their preferred approach as circumstances change and as they develop a more nuanced understanding of how best to proceed.”)). In the meantime, EPA planned to study the science and ultimately either establish an appropriate carbon accounting framework for biogenic CO₂ emissions or, to repeat, allow the Deferral Rule to expire and treat biogenic CO₂ emissions like other CO₂ emissions.

My colleagues attack the Deferral Rule because it “nowhere offers an interpretation of the Clean Air Act that would allow the agency to treat biogenic carbon dioxide sources differently.” Maj. Op. 13-14. But EPA is not *permanently* treating biogenic CO₂ emissions differently. As the Deferral Rule explains, EPA believes, based on the evidence currently in its possession, that further study may support a decision to give special treatment to some biogenic emissions. Deferral Rule, 76 Fed. Reg. 43,496; *see also id.* at 43,499 (“EPA believes based on information currently before the Agency that at least some biomass feedstocks . . . have a negligible impact on the net carbon cycle, or possibly even a positive net effect.”). If further study does not bear this out, EPA has implicitly acknowledged that it will treat biogenic CO₂ emissions as it does other CO₂ emissions. *Cf. id.* at 43,498 (“[EPA] will be using the three-year deferral period to better understand the science associated with biogenic CO₂ emissions and to explore *whether or not* a permanent exemption is permissible” (emphasis added)).³

³ Contrary to my colleagues’ suggestion, the step-at-a-time doctrine does not require that an agency articulate precisely what constitutes full compliance with the statute at the time it takes an incremental step. *Compare* Maj. Op. 14 (criticizing EPA because “we simply have no idea what EPA believes constitutes ‘full compliance’ with the statute”), *with Pub. Citizen*, 374 F.3d at 1263 (permitting agency to delay “a final decision regarding the

To be sure, in *Coalition for Responsible Regulation*, 684 F.3d 102 (D.C. Cir. 2012), we held that “once the Tailpipe Rule set motor-vehicle emission standards for greenhouse gases, they became a regulated pollutant under the Act, requiring PSD and Title V greenhouse permitting.” *Id.* at 115. But, just as EPA proceeded gradually in regulating GHGs under the Tailoring Rule, EPA has delayed its regulation of a specific GHG *via* the Deferral Rule.⁴ The fact that EPA is *required* to take action does not preclude it from phasing in the action using the step-at-a-time method. In *Grand Canyon Air Tour*, the Congress required the Federal Aviation Administration (FAA), within 120 days of enactment of the Overflights Act, to “prepare and issue a final plan for the management of air traffic in the air space above the Grand Canyon.” *See* 154 F.3d at 460. After the FAA promulgated only interim measures, the Grand Canyon Trust challenged it as “too little” and “too late.” *Id.* at 473. We rejected its challenge, declaring that, although “it would be arbitrary and capricious for an agency simply to thumb its nose at Congress and say—without any explanation—that it simply does not intend to achieve a congressional goal on any timetable at all . . . the FAA has not taken that course here. It has never defended the Final Rule as the sole means for [satisfying the statute], but only as the first of three steps.” *Id.* at 477; *cf. Ala. Power Co. v. Costle*, 636 F.2d 323, 357 (D.C. Cir. 1979)

maximum test speed for unbelted dummy testing” until agency completed gathering information and analysis). The rationale for a deferral period is that delay is necessary to allow the agency to determine what it is *unable* to determine at the time, *i.e.*, full compliance with a statutory mandate.

⁴ In *Coalition for Responsible Regulation*, we rejected a challenge to the Tailoring Rule, albeit on lack of standing. 684 F.3d at 113-14.

(“Certain limited grounds for the creation of exemptions are inherent in the administrative process, and their unavailability under a statutory scheme should not be presumed, save in the face of the most unambiguous demonstration of congressional intent”). While the CAA requires EPA to regulate CO₂, it does not foreclose, as one step toward full compliance, EPA’s deferring regulation of a unique type of CO₂ in order to study whether EPA can—and should—treat it differently. EPA does not defend the Deferral Rule as the sole or final means of dealing with biogenic CO₂ emissions nor has it thumbed its nose at the Congress. By July 21, 2014, EPA will take its next step—either by regulating biogenic CO₂ emissions like other CO₂ emissions by default (*i.e.*, the expiration of the Deferral Rule) or by handling biogenic CO₂ emissions specifically.

The necessary implication of the majority opinion is that, no matter the results of EPA’s study, EPA lacks authority to treat biogenic CO₂ emissions differently from other emissions. The CAA defines a major emitting source (*i.e.*, a source subject to PSD and Title V permitting requirements) as a source that “emit[s] or [has] the potential to emit” above-threshold amounts of a regulated pollutant “from” the source. 42 U.S.C. § 7479(1). The petitioners believe, and my colleagues apparently agree, this language precludes EPA from considering “off-site” factors, such as the carbon cycle of the biomass used as a source’s fuel, in determining whether the source is subject to PSD. But the language has *not* precluded EPA from recognizing *de minimis* exceptions from the statute. Under the *de minimis* doctrine, “[c]ourts should be reluctant to apply the literal terms of a statute to mandate pointless expenditures of effort.” *Ala. Power*, 636 F.2d at 360. Unless the Congress has been “extraordinarily rigid,” we will uphold an exemption from the statute’s literal terms “when the burdens of regulation yield a gain of trivial or no value.” *Id.* at 360-61. PSD and Title V are meant to protect against

harm resulting from the emission of regulated pollutants, *see, e.g.*, 42 U.S.C. § 7470, and EPA has found that GHGs such as CO₂ cause harm by accumulating in excess amounts in the atmosphere, *see, e.g.*, Tailoring Rule, 75 Fed. Reg. at 31,519. If EPA’s review shows, however, that the combustion of certain biomass feedstocks has no effect on—or even reduces—atmospheric CO₂ levels, EPA could then use this information to support a *de minimis* exception to the regulation of certain biogenic CO₂ emissions. *Cf. Ala. Power*, 636 F.2d at 330 (“[T]he application of BACT requirements to the emission of all pollutants . . . no matter how miniscule . . . could impose severe administrative [and economic] burdens . . . [T]he proper way to resolve this difficulty is to define a *de minimis* standard . . .”). Exempting from regulation a source with a negligible—and particularly, a beneficial—effect on atmospheric CO₂ levels would be perfectly consistent with the overarching PSD and Title V permitting regime—a regime which expressly does not regulate “minor” sources that cause little harm because they release below-threshold levels of pollutants. *See* 42 U.S.C. §§ 7479(1), 7661(2), 7602(j). Given the availability of a *de minimis* exception, it is not as though, as the majority necessarily assumes, that the Deferral Rule delays the inevitable.⁵

⁵ Moreover, to the extent it could be shown that the CAA is so “extraordinarily rigid” as to bar EPA from considering off-site activity in determining a stationary source’s “potential to emit” CO₂, EPA is *also* studying “the nature of the fuel combusted on site at the ‘stack,’ ” which does not involve off-site activity. Br. of Resp’ts 49. If EPA concludes it cannot consider off-site activity, it could adjust its regulation using only on-site activity like stack combustion.

In sum, EPA’s decision to stop and think before regulating in a complex—and changing—area is eminently reasonable.

II.

Alternatively, under the prudential ripeness doctrine, I believe we should not have reached the merits of this case. The ripeness doctrine prevents the court from prematurely adjudicating a dispute. *Abbott Labs. v. Gardner*, 387 U.S. 136, 148-49 (1967). The doctrine comes “from Article III limitations on judicial power and from prudential reasons for refusing to exercise jurisdiction.” *Reno v. Catholic Soc. Servs., Inc.*, 509 U.S. 43, 57 n.18 (1993). “The ripeness doctrine, even in its prudential aspect, is a threshold inquiry . . .” *In re Aiken Cnty.*, 645 F.3d 428, 434 (D.C. Cir. 2011). The court stays its hand so the “administrative process [can] run its course before binding parties to a judicial decision.” *Am. Petroleum Inst. v. EPA*, 683 F.3d 382, 386 (D.C. Cir. 2012) (challenge to EPA rule continuing to regulate certain materials held unripe because EPA subsequently issued NPRM significantly changing regulatory scheme). This doctrine gives “the challenging party [time] to convince the agency to alter a tentative position,” “provides the agency an opportunity to correct its own mistakes and to apply its expertise,” narrows the legal and factual issues at play and “comports with our theoretical role as the governmental branch of last resort.” *Id.* at 386-87 (quotation marks omitted). It thus “ensures that Article III courts make decisions only when they have to, and then, only once.” *Id.* at 387.

We consider two factors in assessing prudential ripeness: (1) the “fitness of the issues for judicial decision” and (2) “the extent to which withholding a decision will cause hardship to the parties.” *Id.* (quotation marks omitted).

A. *Fitness for Review*

The first factor—fitness—is “meant to protect the agency’s interest in crystallizing its policy before that policy is subjected to judicial review and the court’s interests in avoiding unnecessary adjudication and in deciding issues in a concrete setting.” *Id.* (quotation marks omitted). We must consider, *inter alia*, “whether [the issue] is purely legal, whether consideration of the issue would benefit from a more concrete setting, and whether the agency’s action is sufficiently final.” *Id.* (quotation marks omitted). An issue is particularly unfit for review if, by staying our hand temporarily, we need never address it. See *Nat’l Treasury Emps. Union v. United States*, 101 F.3d 1423, 1431 (D.C. Cir. 1996). We

decline to review “tentative” agency positions because doing so “severely compromises the interests” the ripeness doctrine protects: “The agency is denied full opportunity to apply its expertise and to correct errors or modify positions in the course of a proceeding, the integrity of the administrative process is threatened by piecemeal review of the substantive underpinnings of a rule, and judicial economy is disserved because judicial review might prove unnecessary if persons seeking such review are able to convince the agency to alter a tentative position.”

Am. Petroleum Inst., 683 F.3d at 387 (quoting *Pub. Citizen Health Research Grp. v. Comm’r, FDA*, 740 F.2d 21, 31 (D.C. Cir. 1984)).

The Deferral Rule—a temporary rule that expires or will be replaced by July 21, 2014—is not fit for review. First, by staying our hand, we would give the petitioners an opportunity to convince EPA to promulgate a rule more to

their liking. If EPA promulgated such a rule, or simply allowed the Deferral Rule to expire on July 21, 2014, the petitioners' challenge could be resolved. *See also Tex. Indep. Producers & Royalty Owners Ass'n v. EPA*, 413 F.3d 479, 483 (5th Cir. 2005) (EPA decision to defer permit requirements for certain oil and gas construction sites unripe because "[g]iven that EPA has specifically stated its intent to examine, during the Deferral Period, the issue of how best to resolve questions . . . regarding section 402(l)(2) of the Clean Water Act, any interpretation we would provide would necessarily prematurely cut off EPA's interpretive process" (quotation marks omitted)).

Second, even assuming EPA issues a superseding rule to which the petitioners object, the Deferral Rule will crystallize the issues raised by their challenge. *See, e.g., Am. Petroleum Inst.*, 683 F.3d at 388 ("In the ongoing rulemaking, EPA could change its mind and keep the transfer-based exclusion, in which case the issue goes away; or, if EPA stays the course and abolishes the transfer-based exclusion, the dispute will become concrete and straightforward."); *Nat'l Treasury*, 101 F.3d at 1431 ("[W]hile the broad legal theory advanced by appellants may be as complete as it ever will, the facts upon which its resolution may depend are not 'fully crystallized' . . ."). The current dispute is whether EPA may postpone regulatory action based on insufficient information. If EPA promulgated a superseding rule exempting biogenic CO₂ from regulation, the dispute would be whether EPA may promulgate a permanent (or at least more crystallized) exemption. *See* Deferral Rule, 76 Fed. Reg. at 43,492-93; *see also Am. Petroleum Inst.*, 683 F.3d at 387 (finding lack of ripeness when "EPA responds that the pyrophoric properties

of the catalysts warrant further consideration to make sure they will not be discarded during transfer”).⁶

To be sure, “an agency can[not] stave off judicial review of a challenged rule simply by initiating a new proposed rulemaking that would amend the rule in a significant way.” *Am. Petroleum Inst.*, 683 F.3d at 388. While EPA has not yet proposed a final rule, it has also not engaged in a “thinly veiled attempt to evade review,” *id.*, but instead committed itself to act by a date certain—July 21, 2014. *See* Oral Arg. Tr. 28-29 (Apr. 8, 2013) (EPA’s Science Advisory Board has issued final report now being analyzed); *see also Wheaton Coll. v. Sebelius*, 703 F.3d 551, 552 (D.C. Cir. 2012) (“We take the government at its word and will hold it to it.”).

For the foregoing reasons, I believe the Deferral Rule is not fit for review at this time.

B. Hardship to the Parties

“To outweigh the[] institutional interests in the deferral of review, any hardship caused by that deferral must be *immediate and significant*. Considerations of hardship that might result from delaying review will *rarely* overcome the . .

⁶ The majority opinion does not bar EPA from ultimately exempting biogenic CO₂ from PSD and Title V regulation. Instead, my colleagues strike down a temporary agency position almost certain to be recast. They thus threaten the “integrity of [the] administrative process . . . by piecemeal review of the substantive underpinnings of a rule.” *Pub. Citizen*, 740 F.2d at 31; *see also Am. Petroleum Inst.*, 683 F.3d at 388 (“[T]o the extent API and EPA dispute whether some sort of transfer-based exclusion for hazardous secondary materials is necessary to comport with the concept of ‘discard,’ that issue also is best addressed once EPA finally decides whether to eliminate the transfer-based exclusion it adopted in the 2008 Rule.”).

. fitness problems inherent in attempts to review tentative positions.” *Am. Petroleum Inst.*, 683 F.3d at 389 (emphases added) (quotation marks omitted).

The petitioners argue, and my colleagues agree, Maj. Op. 10, that the hardship caused by the Deferral Rule is especially serious because the Deferral Rule could result in a “permanent” exemption from PSD permitting. Specifically, a stationary source constructed during the deferral period without obtaining a PSD permit (because of its temporary biogenic CO₂ exemption) could, in theory, escape permitting forever because a PSD permit would then be required *only if* the source is modified. *See* 42 U.S.C. § 7475(a). It is possible, then, that even if EPA decides to regulate biogenic CO₂ emissions like all other CO₂ emissions, a source constructed during the deferral period would never need to obtain a PSD permit if it remains unmodified.

The Deferral Rule does not open the floodgates as the petitioners and my colleagues fear. It allows a source to avoid PSD permitting only if (1) it has the potential to emit CO₂ as a result of biogenic emissions; (2) its potential to emit biogenic CO₂ exceeds Tailoring Rule thresholds; (3) it is not otherwise subject to PSD permitting based on its potential to emit other pollutants or non-biogenic CO₂ emissions; *and* (4) it is able to obtain a minor source (non-PSD) permit and commence construction⁷ no later than July 21, 2014. And a source could *permanently* avoid PSD permitting *only if* it met the above requirements *and* never underwent a “major modification

⁷ Tailoring Rule, 75 Fed. Reg. at 31,594 (“PSD preconstruction permitting requirements do not generally preclude a source from continuing actual construction that began before the source was a source required to obtain a PSD permit.”).

determination.” See Deferral Rule, 76 Fed. Reg. at 43,499.⁸ At oral argument, the petitioners were able to name only one source—a facility located in Allendale, South Carolina—that has been able to avoid PSD permitting “in direct reliance on” the Deferral Rule. Oral Arg. Tr. 5-6, 10. The intervenors describe the number of sources that could take advantage of the Deferral Rule as “a handful,” Oral Arg. Tr. 32. The petitioners submitted with their opening brief the declaration of Ranajit Sahu, an environmental, mechanical and chemical consultant, listing eight sources he reviewed that had obtained “minor source” (non-PSD) permits but “[e]scape[d] PSD [d]ue to the Biomass Exemption:” the Allendale facility plus seven others. Sahu Decl. at 14, 20-24. Six of them, however, obtained their minor source permits *before* the Deferral Rule was promulgated. *Compare* Sahu Decl. 22-24 (referencing Biogreen, Concord, Dorchester, Kershaw, Kamath Falls, Mancelona and Menominee facilities), *with* Sahu Decl. 5 (Biogreen obtained permit on December 15, 2010; Dorchester and Kershaw obtained permits on June 30, 2011; Klamath Falls obtained permit on December 30, 2010; Mancelona obtained permit on February 9, 2010; and Menominee obtained permit on May 11, 2011). If any of these sources commenced construction before July 2011, as is likely, the Deferral Rule would not affect that source because no source

⁸ The petitioners seem to concede that the hardship they face is remediable. Br. for Pet’rs 26 (“[E]ven if the plants commence construction under the illegal Exemption, upon a reversal of the Exemption they can be required to source more sustainably grown fuel and/or comply with more stringent limits requiring full operation and maintenance of their pollution control equipment.”).

was subject to PSD based solely on CO₂ emissions before that date.⁹

To sum up, not only is this case unfit for review but the hardship of which the petitioners complain is hyperbolically overblown. The Deferral Rule does not deregulate scores of polluters.¹⁰ Instead, it temporarily maintains the heretofore long-time status quo¹¹ for a limited number of stationary

⁹ While Sahu avers that “many” of the six facilities “have not commenced construction,” he does not identify any of the “many.” Sahu Decl. 20.

¹⁰ In discussing the hardship prong, the majority declares that “we have no idea how many biogenic carbon dioxide sources have been constructed since March 2012.” Maj. Op. 12. This assertion is way off the mark. The petitioners themselves could name only one source meeting the Deferral Rule exception. Their expert’s affidavit isolated only eight, six of which might not fit the exception. *See supra* pp. 15-16 & n.9. If the petitioners have not been able to establish severe harm by now, we should not attempt to fill the jurisdictional gap in their challenge.

¹¹ As an aside—my colleagues do not address this point—what the petitioners complain of is not massive deregulation but instead temporary maintenance of the status quo. Significantly, the harm they allege does not come from unregulated biogenic CO₂ emissions; rather, their primary alleged harm is that the Deferral Rule allows for the less strict regulation of emissions of certain *non*-CO₂ pollutants (such as particulate matter and nitrogen oxides) from biogenic CO₂ emitters. But if a stationary source—biogenic or otherwise—has the potential to emit above-threshold amounts of a regulated pollutant other than GHGs, it must obtain a PSD permit and meet BACT not only for the pollutant(s) that made it subject to PSD but also for *all* pollutants emitted over certain thresholds (even for a pollutant not emitted in a quantity sufficient by itself to subject the source to PSD). *See* Deferral Rule, 76 Fed. Reg. at 43,493. While the Deferral Rule exempts from PSD a source whose

sources that—until July 1, 2011—had never been subject to regulation as a major source under PSD. Given these circumstances, and our role as “the governmental branch of last resort,” *Aiken Cnty.*, 645 F.3d at 434, I believe we should deny the petition; in the alternative, we should hold the case in abeyance pending either the expiration of the Deferral Rule on July 21, 2014 or EPA action taken by that date.¹²

biogenic CO₂ emissions alone make it subject to PSD, it does not allow a source with the potential to emit above-threshold quantities of other regulated pollutants to escape regulation. *See id.* at 43,492 (“This deferral applies only to biogenic CO₂ emissions and does not affect non-GHG pollutants or other GHGs . . . emitted from the combustion of biomass fuel.”). The Deferral Rule’s effect on PSD applicability, then, is minimal: as noted earlier, it simply preserves the pre-July 2011 status quo. Before July 1, 2011, a stationary source was subject to PSD if it had the potential to emit certain quantities of pollutants *other* than CO₂. Under the Tailoring Rule, a source that was not otherwise subject to PSD became, as of July 1, 2011, subject to PSD based on its GHG emissions. The Deferral Rule exempts from this set of newly-regulated sources those subject to PSD based only on their *biogenic* CO₂ emissions. Preserving the status quo for this limited category for—now—only a matter of months does not constitute “immediate and significant” hardship.

¹² As my colleagues note, Maj. Op. 10, the Deferral Rule makes it *optional* for permitting authorities (e.g., states) not to regulate biogenic CO₂ emissions during the deferral period but they identify only a single state—Massachusetts—that continues to regulate biogenic CO₂ emissions. Maj. Op. 10. That only one permitting authority has seen fit to regulate biogenic CO₂ emissions during the life of the Deferral Rule underscores the reasonableness of EPA’s decision to study the science before imposing burdensome regulatory obligations to achieve uncertain and potentially negligible benefits.